

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2001

Commission file number 1-13202

Nokia Corporation
(Exact name of Registrant as specified in its charter)

Republic of Finland
(Jurisdiction of incorporation)

Keilalahdentie 4, P.O. Box 226, FIN-00045 NOKIA GROUP, Espoo, Finland
(Address of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
American Depositary Shares Shares, par value EUR 0.06	New York Stock Exchange New York Stock Exchange⁽¹⁾

⁽¹⁾ Not for trading, but only in connection with the registration of American Depositary Shares representing these shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the registrant's classes of capital or common stock as of the close of the period covered by the annual report.

Shares, par value EUR 0.06: **4,737,530,121**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐ Item 18 ☒

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INTRODUCTION AND USE OF CERTAIN TERMS

Nokia Corporation is a public limited liability company incorporated under the laws of the Republic of Finland. In this document, any reference to “we,” “us,” “the Group” or “Nokia” means Nokia Corporation and its subsidiaries on a consolidated basis, except where we make clear that the term means Nokia Corporation or a particular subsidiary or business group only, and except that references to “our shares,” matters relating to our shares or matters of corporate governance shall refer to the shares and corporate governance of Nokia Corporation. Nokia Corporation has published its consolidated financial statements in euro for periods beginning on or after January 1, 1999. In this Form 20-F, references to “EUR,” “euro” or “€” are to the common currency of the European Economic and Monetary Union, or EMU, references to “FIM,” “Finnish markka” or “markka” are to the prior currency of the Republic of Finland and references to “dollars,” “US dollars,” “USD” or “\$” are to the currency of the United States. Solely for the convenience of the reader, this Form 20-F contains conversions of selected euro amounts into US dollars at specified rates, or, if not so specified, at the rate of 0.8901 US dollars per euro, which was the noon buying rate in New York City for cable transfers in euro as certified for customs purposes by the Federal Reserve Bank of New York on December 31, 2001. No representation is made that the amounts have been, could have been or could be converted into US dollars at the rates indicated or at any other rates.

In this Form 20-F, unless otherwise stated, references to “shares” are to Nokia Corporation shares, par value EUR 0.06.

Our principal executive office is currently located at Keilalahdentie 4, P.O. Box 226, FIN-00045 NOKIA GROUP, Espoo, Finland and our telephone number is +358 (0)7 1800-8000.

Nokia Corporation furnishes Citibank, N.A., as Depositary, with consolidated financial statements and a related audit opinion of our independent public accountants annually. These financial statements are prepared on the basis of International Accounting Standards, or IAS. Nokia’s consolidated financial statements contain a reconciliation of net income and shareholders’ equity to accounting principles generally accepted in the United States, or US GAAP. Upon receipt, the Depositary generally delivers these consolidated financial statements to record holders of American Depositary Receipts, or ADRs, evidencing American Depositary Shares, or ADSs. One ADS represents one share. We also furnish the Depositary with quarterly reports containing unaudited financial information prepared on the basis of IAS, as well as all notices of shareholders’ meetings and other reports and communications that are made available generally to our shareholders. The Depositary makes these notices, reports and communications available for inspection by record holders of ADSs and delivers to all record holders of ADSs notices of shareholders’ meetings received by the Depositary. In addition to the reports delivered to holders of ADSs by the Depositary, holders can access our consolidated financial statements as well as other information previously included in our printed annual reports, at www.nokia.com. With the distribution of our 2001 consolidated financial statements we offered our shareholders and ADS holders the option of receiving all of these documents electronically in the future.

FORWARD-LOOKING STATEMENTS

It should be noted that certain statements herein which are not historical facts, including, without limitation, those regarding:

- the timing of product deliveries;
- our ability to develop and implement new products and technologies;
- expectations regarding market growth and developments;
- expectations for growth and profitability; and
- statements preceded by “believe,” “expect,” “anticipate,” “foresee” or similar expressions

are forward-looking statements.

Because these statements involve risks and uncertainties, actual results may differ materially from the results that we currently expect. Factors that could cause these differences include, but are not limited to:

- developments in the mobile communications market including the continued development of the replacement market and the Company’s success in the 3G market;
- demand for products and services;
- market acceptance of new products and service introductions;
- the availability of new products and services by operators;
- weakened economic conditions in many of the Company’s principal markets;
- pricing pressures;
- intensity of competition;
- the impact of changes in technology;
- consolidation or other structural changes in the mobile communications market;
- the success and financial condition of the Company’s partners, suppliers and customers;
- the management of the Company’s customer financing exposure;
- the continued success of product development by the Company;
- the continued success of cost-efficient, effective and flexible manufacturing by the Company;
- the ability of the Company to source component production and R&D without interruption and at acceptable prices;
- inventory management risks resulting from shifts in market demand;
- fluctuations in exchange rates, including, in particular, the fluctuations in the euro exchange rate between the US dollar and the Japanese yen; and
- the impact of changes in government policies, laws or regulations

as well as the risk factors specified in this document under “Item 3.D Risk Factors.”

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

3.A Selected Financial Data

The financial data set forth below at December 31, 2000 and 2001 and for each of the years in the three-year period ended December 31, 2001 have been derived from our consolidated financial statements included in Item 18 of this Form 20-F. Financial data at December 31, 1997, 1998 and 1999 and for each of the years in the two-year period ended December 31, 1998 have been derived from Nokia's previously published consolidated financial statements not included in this document.

The financial data at December 31, 2000 and 2001 and for each of the years in the three-year period ended December 31, 2001 should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements.

The audited consolidated financial statements from which the selected consolidated financial data set forth below have been derived were prepared in accordance with IAS, and net income and shareholders' equity have been reconciled to US GAAP, which differ in some respects from IAS. For a discussion of the principal differences between IAS and US GAAP, see "Item 5.A Operating Results—Principal Differences between IAS and US GAAP" and note 37 to our consolidated financial statements.

The financial data set forth below for the years ended December 31, 1997 and 1998 have been converted into euro at the rate of 5.94573 Finnish markka per euro, the conversion ratio announced on December 31, 1998. As of January 1, 1999, we adopted the euro as our reporting currency.

	Year ended December 31,					
	1997	1998	1999	2000	2001	2001
	(EUR)	(EUR)	(EUR)	(EUR)	(EUR)	(USD)
Profit and Loss Account Data						
<i>Amounts in accordance with IAS</i>						
Net sales	8,849	13,326	19,772	30,376	31,191	27,763
Operating profit	1,422	2,489	3,908	5,776	3,362	2,993
Profit before tax and minority interests	1,408	2,456	3,845	5,862	3,475	3,093
Profit from continuing operations	1,009	1,680	2,577	3,938	2,200	1,958
Discontinued operations	44	—	—	—	—	—
Cumulative prior year effect of change in accounting policies	—	70	—	—	—	—
Net profit	1,053	1,750	2,577	3,938	2,200	1,958
Continuing operations						
Basic earnings per share ⁽¹⁾	0.22	0.37	0.56	0.84	0.47	0.42
Diluted earnings per share ⁽¹⁾	0.22	0.36	0.54	0.82	0.46	0.41
Net profit						
Basic earnings per share ⁽¹⁾	0.23	0.38	0.56	0.84	0.47	0.42
Diluted earnings per share ⁽¹⁾	0.23	0.37	0.54	0.82	0.46	0.41
Cash dividends per share ⁽¹⁾⁽²⁾	0.08	0.12	0.20	0.28	0.27	0.24
Average number of shares (millions of shares)						
Basic	4,533	4,553	4,594	4,673	4,703	4,703
Diluted	4,613	4,693	4,743	4,793	4,787	4,787
<i>Amounts in accordance with US GAAP</i>						
Income from continuing operations	1,032	1,689	2,542	3,847	1,903	1,694
Income from discontinued operations	44	—	—	—	—	—
Net income	1,076	1,689	2,542	3,847	1,903	1,694
Continuing operations						
Basic earnings per share ⁽¹⁾	0.23	0.37	0.55	0.82	0.40	0.36
Diluted earnings per share ⁽¹⁾	0.22	0.36	0.54	0.80	0.40	0.35
Net income						
Basic earnings per share ⁽¹⁾	0.24	0.37	0.55	0.82	0.40	0.36
Diluted earnings per share ⁽¹⁾	0.23	0.36	0.54	0.80	0.40	0.35

	Year ended December 31,					
	1997 (EUR)	1998 (EUR)	1999 (EUR) (in millions)	2000 (EUR)	2001 (EUR)	2001 (USD)
Balance Sheet Data						
<i>Amounts in accordance with IAS</i>						
Fixed assets and other non-current assets	1,589	2,220	3,487	6,388	6,912	6,152
Cash and cash equivalents	2,060	2,891	4,159	4,183	6,125	5,452
Other current assets	3,371	4,923	6,633	9,319	9,390	8,358
Total assets	7,020	10,034	14,279	19,890	22,427	19,962
Shareholders' equity	3,620	5,109	7,378	10,808	12,205	10,864
Minority interests	33	63	122	177	196	174
Long-term interest-bearing liabilities	226	257	269	173	207	184
Other long-term liabilities	50	152	138	138	253	225
Borrowings due within one year	554	760	793	1,116	831	740
Other current liabilities	2,537	3,693	5,579	7,478	8,735	7,775
Total shareholders' equity and liabilities	7,020	10,034	14,279	19,890	22,427	19,962
Net interest-bearing debt ⁽³⁾	(1,280)	(1,874)	(3,097)	(2,894)	(5,087)	(4,528)
Share capital	252	255	279	282	284	253
<i>Amounts in accordance with US GAAP</i>						
Total assets	7,118	10,030	14,289	19,676	22,038	19,616
Shareholders' equity	3,633	5,102	7,384	10,871	12,021	10,700

(1) Adjusted for share splits

(2) Translated into US dollars at the noon buying rate on the dividend payment date

(3) Borrowings due within one year and long-term interest-bearing liabilities, less cash and cash equivalents

Distribution of Earnings

We distribute retained earnings, if any, within the limits set by the Finnish Companies Act. We make and calculate the distribution, if any, either in the form of cash dividends, share buy-backs, or in some other form (or a combination of these). There is no specific formula by which the amount of a distribution is determined, although some limits set by law are discussed below. The timing and amount of future distributions of retained earnings, if any, will depend on our future earnings and financial condition.

Under the Finnish Companies Act, we may distribute retained earnings on our shares only upon a shareholder resolution, on the basis of our annual accounts on a consolidated and individual basis, as approved by our shareholders and, subject to limited exceptions, in the amount proposed by our Board of Directors. The amount of any distribution is limited to, among other things, the lower of our retained earnings on a consolidated and individual basis, in each case available at the end of the preceding financial year. Subject to exceptions relating to the right of minority shareholders to request otherwise, the distribution may not exceed the amount proposed by the Board of Directors.

Under the Finnish Companies Act, it is possible for Finnish companies to repurchase their own shares pursuant to either a shareholders' resolution or an authorization to the Board of Directors approved by the company's shareholders. The undertaking of share buy-backs is not only subject to the regulations in the Companies Act, but also to the rules of the stock exchanges on which the repurchases take place. Since 2000, the Board of Directors of Nokia has been authorized by our

shareholders in the annual general meetings to undertake repurchases of Nokia's own shares up to 224 million shares in 2000, 225 million shares in 2001 and 220 million shares in 2002. In 2000, we repurchased 3,252,000 shares pursuant to these authorizations for the total amount of EUR 160 million. In 2001, our repurchases amounted to 995,000 shares for the total amount of EUR 21 million.

The table below sets forth the amounts of total cash dividends per share and per ADS paid in respect of each fiscal year indicated. For the purposes of showing the US dollar amounts per ADS, the dividend per share amounts have been translated into US dollars at the noon buying rate on the respective dividend payment date.

	<u>EUR per share</u>	<u>USD per ADS</u>
1997	0.08	0.08
1998	0.12	0.13
1999	0.20	0.19
2000	0.28	0.25
2001	0.27	0.24

In each of 1998 and 1999, we effected a two-for-one share split, effective in public trading on April 16, 1998, and April 12, 1999, respectively. In 2000, we effected a four-for-one share split, effective in public trading on April 10, 2000. In the table above, the dividend per share and dividend per ADS figures for previous periods have been adjusted accordingly.

We make our cash dividend payments in euro. As a result, exchange rate fluctuations will affect the US dollar amount received by holders of ADSs on conversion of these dividends. Moreover, fluctuations in the exchange rates between the euro and the US dollar will affect the dollar equivalent of the euro price of the shares on the Helsinki Exchanges and, as a result, are likely to affect the market price of the ADSs in the United States. See also "Item 3.D Risk Factors—Our net sales and costs are affected by fluctuations in the rate of exchange between the euro, which is our reporting currency, and the US dollar and the Japanese yen as well as certain other currencies."

Exchange Rate Data

Before January 1, 1999, the Finnish markka was a part of the European Monetary System exchange rate mechanism known as the Exchange Rate Mechanism, or ERM. Within the ERM, exchange rates fluctuated within permitted margins, fixed by central bank intervention. Under the provisions of the Treaty on European Union negotiated at Maastricht in 1991 and signed by the then 11 member states of the European Union in early 1992, the EMU superseded the EMS on January 1, 1999, and the euro was introduced as the single European currency. Since this date, the euro has been the lawful currency of the EMU states. The following 12 current member states participate in the EMU and have adopted the euro as their national currency: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain. The fixed legal rate of conversion between the Finnish markka and the euro was announced on December 31, 1998, at 5.94573 Finnish markka per euro.

The following table sets forth information concerning the noon buying rate in New York City for cable transfers as certified for customs purposes by the Federal Reserve Bank of New York for (1) Finnish markka for the years 1997 and 1998, expressed in Finnish markka per US dollar, and (2) euro for the years 1999 through 2001 and for each of the months in the six-month period ended April 30, 2002, expressed in US dollars per euro.

The average rate for a year means the average of the exchange rates on the last day of each month during a year. The average rate for a month means the average of the exchange rates at the end of each day during that month.

For the year ended December 31:	Exchange Rates			
	Rate at period end	Average rate	Highest rate	Lowest rate
	(Finnish markka per USD)			
1997	5.4530	5.2169	5.6000	4.6130
1998	5.0645	5.3433	5.6280	4.8995
	(USD per EUR)			
1999 ⁽¹⁾	1.0070	1.0588	1.1812	1.0016
2000	0.9388	0.9232	1.0335	0.8270
2001	0.8901	0.8954	0.9535	0.8370
For the month ended:				
November 30, 2001	0.8958	0.8883	0.9044	0.8770
December 31, 2001	0.8901	0.8912	0.9044	0.8773
January 31, 2002	0.8594	0.8832	0.9031	0.8594
February 28, 2002	0.8658	0.8707	0.8778	0.8613
March 31, 2002	0.8717	0.8766	0.8836	0.8652
April 30, 2002	0.9002	0.8859	0.9028	0.8750

⁽¹⁾ The noon buying rate for the Finnish markka ceased to be available after January 15, 1999.

On May 20, 2002, the noon buying rate was USD 0.9213 per EUR 1.00.

3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the Offer and Use of Proceeds

Not applicable.

3.D Risk Factors

Set forth below is a description of factors that may affect our business, results of operations and share price from time to time.

The new advanced products and solutions that we are developing incorporate complex, evolving technologies, including third generation technology, or 3G, that require substantial expenditures and resources. However, these new products and solutions may fail to be accepted at the rates or levels we anticipate and we may fail to realize the expected benefits from our investments in these new technologies.

The markets for our products and solutions are characterized by rapidly changing and increasingly complex technologies. At any given time, we are considering and developing a number of products and solutions incorporating advanced technologies from which we will select those that we feel have the best chance for success, based on our expectations of future market demand and evolution. The development and application of new technologies involve time, substantial costs and risks, whether we develop these technologies internally or by acquiring or investing in other companies. The technologies and related products and solutions on which we focus, including 3G systems and handsets, may not be brought to market as quickly as anticipated, may not achieve broad customer acceptance among operators or end-users, or may not prove to be sufficiently compatible with the existing technologies and products of other product and solutions providers.

Demand for new mobile communications or the supply of new mobile services also may not develop as we anticipate. In addition, our new technology, products and solutions may become obsolete more quickly than in the past as communications technology continues to evolve rapidly. Moreover, the revenue growth rates, operating margins and cash flow characteristics of our new businesses developed within Nokia Ventures Organization may be materially different from those of our networks and mobile phones businesses.

Although we strive to be a leader in developing new technologies, products and solutions and emphasize open standards, research and development and successful cooperation with selected companies, the technologies, products and solutions that we choose to pursue may not become as commercially successful as we planned. We also may experience difficulties in realizing the expected benefits from our acquisitions as well as from our other investments in new technologies and businesses, or from our promotion of open standards.

We may not reach the rate of growth that we have set out as our long-term targets.

The year 2001 was, after several years of rapid growth, a technology transition year for the mobile industry, characterized by an increasingly complex operating environment, and compounded by a weakened global economy. There was a decrease in total sales volumes of mobile phones globally and lower capital expenditure by operators compared with prior years resulting in the slight decline of the mobile infrastructure market as well as a significant change in realized versus anticipated growth rates. The future growth of the mobile communications market as well as our growth depends on a number of factors within and outside our control, including network operators' and our ability to commercialize 3G technology, operator investment behavior, the success of existing and new competitors in our markets, the development and acceptance of other new technologies that we may develop, general developments in the communications and technology markets, and the economic growth rates and economic stability of the countries around the world in which we are active.

Delays by operators in installing and launching 3G networks, services and devices also could affect our net sales and operating profits materially and adversely. In addition, mobile phone penetration in a number of countries has reached high levels. As a result, along with increased penetration, we are also continuing to focus on the replacement market to achieve our targeted sales growth. However, the rate of growth of our net sales, operating profit and market share may be lower than our historical growth rates. Any of these factors may affect our ability to reach the growth rates that we have set out as our long-term targets.

We may experience greater variability in our sales and operating results than in the past, particularly depending on the general economic conditions and the pace of development and acceptance of new technologies.

Our quarterly and annual sales and operating results are affected by a wide variety of factors that could affect our net sales and profitability materially and adversely from period to period. The economic slowdown in many markets where we operate, could continue to negatively impact demand for mobile phones, the timing of network capacity build-outs, and the development and acceptance of new technologies including 3G.

Nokia Networks quarterly net sales and operating profit can be affected by general economic conditions and competitive pressures, the progress we make under network contracts, the mix of contracts in process and the evolution from GSM to 3G. Nokia Mobile Phones quarterly net sales and operating margin can be affected by the global growth rate in mobile phone unit sales, which depends in part on regional economic factors in Nokia's major markets, competitive pressures, the timing and success of our new product introductions and shipments, the rate at which network

operators launch new technologies and services for mass consumption, as well as the commercial acceptance of these new technologies and services. Also, recent terrorist activity has created uncertainties that have already adversely affected the global economy. The future effects of terrorist activity on our business and on the global economy remain unknown.

Uncertainties affecting any of these factors, particularly during difficult economic conditions, render estimates of our future sales and operating results even more difficult to make than usual, and therefore may lead us to revise our estimates more frequently than in the past.

The average price of mobile telephones has declined significantly during the last several years. If we are required to reduce our prices in the future, our profit margins may decline unless we are able to offset the impact of these price reductions.

The average mobile phone price has declined significantly during the last several years. We seek to offset the effect of this by, among other actions, increasing sales volumes and reducing manufacturing and logistics costs. We also seek to maintain average price levels by frequently introducing new mobile phones with improved design, technological features and operating efficiencies and by leveraging the strength of our global brand. Although these actions have enabled us to maintain relatively stable average selling prices in recent years, these actions may not continue to be successful and future declines in mobile phone prices may adversely affect our results of operations. See “Item 4.B Business Overview—Industry Opportunity—The Mobile Phone Industry.”

Changes in the communications industry are expected to increase competition and change the competitive landscape and may affect our sales and operating results negatively.

The markets for our products and solutions are intensely competitive. Our competitors, including many new market entrants, may implement new technologies before we do, deliver new products and solutions earlier, or provide more attractively priced, enhanced or better quality products and solutions than we provide. Moreover, as the mobile communications industry moves toward 3G technology, which integrates mobile services with Internet applications, new categories of market entrants are competing for our mobile communications business. The development of other new technologies and potential changes in customer behavior also may change the competitive landscape for our products and solutions in ways that we cannot currently predict.

To date, our principal competitors on a global basis have been Motorola, Ericsson, Siemens and Samsung, although we also compete with a variety of other companies. With the development of new technologies, we may encounter increased competition in our handset business from manufacturers of consumer electronics products and devices that are increasing their focus on mobile communications products and in our networks business from communications equipment, Internet systems and software suppliers, as well as service providers.

The global networks business relies on a limited number of major customers and large multi-year contracts. Unfavorable developments under a major contract or in relation to a major customer may affect our sales, operating results and cash flow adversely.

As the communications market consolidates, there is a worldwide trend towards large-scale global communications customers. Reliance on a limited number of large customers or large and complex system contracts may adversely affect our business if an unfavorable development occurs under a major contract or involving one or more of these customers.

Large multi-year contracts, which are typical in our industry, usually require the dedication of substantial amounts of working capital and other resources, which impacts our cash flow negatively. With the advent of very large, multi-year, fixed price contracts for new technologies,

such as 3G, there is also increased difficulty in projecting the timing of net sales and operating profit associated with these contracts. Moreover, any non-performance by Nokia under these contracts, particularly those relating to 3G and other new technologies, may have significant adverse consequences for us because network operators, which already have made significant investments in licenses and other commitments for new technologies, are demanding stringent contract undertakings such as penalties for contract violations.

Customer financing to network operators is a competitive requirement and can affect our net sales, profits, balance sheet and cash flow adversely.

Network operators sometimes require their suppliers, including us, to arrange or provide long-term financing as a condition to obtaining or bidding on infrastructure projects, especially in connection with 3G technology contracts. In some cases, the amounts of these financings, and the associated impact on our working capital, may be significant.

We have extended a significant amount of customer financing to selected customers. The total aggregate value at December 31, 2001 of our committed customer financing was EUR 4,210 million, of which EUR 1,255 million was outstanding at the same date. Out of the outstanding customer financing, EUR 1,128 million was in respect of loans and EUR 127 million was in respect of financial guarantees. Of our committed customer financing at December 31, 2001, 86% was in respect of 3G networks.

The current assessment of our customer market indicates that we do not expect our total committed customer financing to increase significantly. We expect the overall amount of our committed customer financing to increase by a small amount during 2002 as compared to the December 31, 2001 level. As a strategic market requirement, we plan to continue to extend customer financing to a small number of selected customers. However, should customer requirements, market or economic conditions change significantly, we may be required to increase materially the total amount of our committed customer financing. Outstanding customer financing is expected to increase in 2002 as customers draw on available financing.

In 2001, our total committed customer financing increased significantly compared to previous years. See “Item 5.B Liquidity and Capital Resources.” Our intent is to mitigate this exposure, market conditions permitting. We are seeking to make arrangements with financial institutions and investors to transfer part of the credit risk we have incurred from the commitments and outstanding loans we have made as well as from the financial guarantees we have given. However, our ability to manage our total committed customer finance exposure depends on a number of factors, including our capital structure, market conditions affecting our customers, the level of credit available to us and our ability to mitigate exposure on acceptable terms.

The financial requirements for building out 3G and related networks are substantial. In particular, some operators, including those that may purchase our networks, have incurred significant indebtedness in connection with the acquisition of 3G licenses or are early stage companies without an established customer base or revenue streams. Defaults by these operators could occur for reasons beyond our control, and could result in the restructuring of these financing arrangements or credit losses. In 2001, we wrote off EUR 714 million in customer loans relating to a defaulted financing to Telsim (EUR 669 million), a GSM operator in Turkey, and to the insolvency of Dolphin in the United Kingdom (EUR 45 million). We cannot guarantee that we will be successful in providing this type of financing to customers, in analyzing and mitigating exposure to their underlying credit risks and in otherwise managing the challenges raised by our significantly increased customer financing. See “Item 4.B Business Overview—Nokia Networks,” “Item 5.B Liquidity and Capital Resources,” “Item 8.A.7 Litigation” and note 34b to our consolidated

financial statements included in Item 18 of this Form 20-F for a more detailed discussion of issues relating to vendor financing and related commercial credit risk.

Our growth and profitability could be adversely affected if we fail to maintain optimal production capacity, as well as cost-efficient, effective and flexible manufacturing operations.

Our manufacturing operations are complex, require advanced and costly equipment and include outsourcing to third parties. These operations are continuously modified in an effort to improve manufacturing efficiency and flexibility. We expect these characteristics to become even more acute as 3G technology develops and mass production of products based on this technology commences. We may experience difficulties in ramping up or down production at our facilities, adopting new manufacturing processes and finding the most timely way to develop the best technical solutions for new products. Difficulties in achieving optimal levels of manufacturing efficiency for 3G products and solutions may result from, among other things, capacity constraints, construction delays or delays in adjusting production at our facilities, upgrading or expanding existing production capacity or changing process technologies. In addition, during periods of slower growth, we may have excess capacity and may incur various costs relating to existing commitments to suppliers, redundancies, impairment of related assets and structural changes to our operations.

We depend on our suppliers to deliver fully functional components on time and their failure to do so could adversely affect our ability to deliver our products successfully and on time.

Our manufacturing operations also depend on obtaining adequate supplies of fully functional components on a timely basis. Our principal requirements are for electronic components, such as semiconductors, microprocessors, micro controllers and memory devices, which have a wide range of applications in our communications products. In addition, a particular component may be available only from a limited number of suppliers. We also outsource a portion of our product production to third parties. If a supplier of components fails to meet the required quality standards, and some of our products consequently fail to function fully, this could cause us to incur warranty or recall costs, could adversely affect our sales and consumer confidence in our products, and ultimately could harm the Nokia brand. Suppliers may from time to time extend lead times, limit supplies or increase prices due to capacity constraints or other factors, which could adversely affect our ability to deliver our products on a timely basis. Moreover, if one of the third parties to which we outsource production fails to perform, or experiences delays or disruption to its production, or financial difficulties, this could adversely affect our business.

We are developing a number of our new products and solutions in partnership with other companies. If any of these companies were to fail to perform, we may not be able to bring our products and solutions to market successfully or on a timely basis.

We sometimes invite providers of technology, components or software critical to the production of a number of our products and solutions, including those employing 3G technology, to work with us to develop these technologies. These arrangements involve expenditure by each company of various resources, including technology, research and development as well as personnel. We attempt to structure these arrangements to maximize cooperation and loyalty between the parties. However, if these arrangements do not develop as expected, especially those that involve proprietary components and supplemental technologies, if the products produced by companies working with us do not meet the required quality standards, or the financial standing of our partners deteriorates, our ability to introduce these new products and solutions successfully and on schedule may be hampered.

If we are unable to recruit and retain skilled employees we may not be able to implement our growth strategies and, consequently, our results of operations may suffer.

To meet the challenges of sustaining growth and retaining the effectiveness of our operations, changes in technology and an intensely competitive environment, especially as we continue to develop our 3G and other new technologies, we must continue to recruit and retain highly skilled employees with a comprehensive understanding of many different and evolving technologies. Although we seek to create a corporate culture that encourages creativity and continuous learning, competition for skilled personnel in our industry remains keen. We also are continuously developing our compensation and benefit policies and taking other measures to attract and retain skilled personnel. However, we may encounter shortages of sufficient numbers of appropriately skilled personnel in the future.

Third-party claims that we have infringed their intellectual property rights could result in costly and time-consuming litigation or the invalidation of intellectual property rights on which we depend.

Our products include increasingly complex technological solutions that incorporate a variety of patented and proprietary technologies. As the number of entrants in the market grows and the complexity of the technology and the overlap of product functionalities increase, the possibility of an inadvertent infringement and related intellectual property claim against us increases. There may be patents and patent owners relevant to our product lines that are unknown to us. In addition, although we endeavor to ensure that companies that work with us possess appropriate intellectual property rights, we recognize that we cannot fully avoid risks of intellectual property rights infringement created by companies with which we work in cooperative research and development activities. Similarly, we or our customers may face claims of infringement in connection with our customers' use of our products and solutions.

Any such claims, regardless of merit, could result in costly litigation and the payment of damages and other compensation, divert the attention of our personnel, cause product shipment delays or require us to develop non-infringing technology or to enter into royalty or licensing agreements. If we were unable to develop non-infringing technology, or if royalty or licensing agreements were not available on commercially reasonable terms, we could be precluded from making and selling the affected products. As new features are added to our products, we may need to acquire further licenses, including from new and sometimes unidentified intellectual property owners. We cannot be sure of the cost of obtaining any necessary licenses. See "Item 4.B Business Overview—Patents and Licenses" for a more detailed discussion of our intellectual property activities.

Allegations of health risks from the electromagnetic fields generated by base stations and mobile handsets, and the lawsuits and publicity relating to them, regardless of merit, could affect our operations negatively by leading consumers to reduce their use of mobile phones or by causing us to allocate monetary and personnel resources to these issues.

There has been public speculation about possible health risks to individuals from exposure to electromagnetic fields from base stations and from the use of mobile phones. While a substantial amount of scientific research conducted to date by various independent research bodies has indicated that these radio signals, at levels within the limits prescribed by public health authority safety standards and recommendations, present no adverse effect to human health, we cannot be certain that future studies, irrespective of their scientific basis, will not suggest a link between electromagnetic fields and adverse health effects that would adversely affect our share price. Research into these issues is ongoing by government agencies, international health organizations and other scientific bodies in order to develop a better scientific and public understanding of these

issues. Our contributions to ongoing research efforts are described in “Item 4.B Business Overview—Research and Development.”

Currently, Nokia and several other mobile phone manufacturers, distributors and network operators have been named as defendants in a class action litigation. The litigation has been consolidated and filed in a US federal court in Baltimore, Maryland, United States. The suits allege that the use of mobile phones without a headset poses a health risk. In addition, Nokia and other mobile phone manufacturers and network operators have been named as defendants in four lawsuits by individual plaintiffs who allege that the radio emissions from mobile phones caused or contributed to each plaintiff's brain tumor. See “Item 8.A.7—Litigation” for a more detailed discussion of these lawsuits.

Although Nokia products and solutions are designed to meet all relevant safety standards and recommendations globally, no more than a perceived risk of adverse health effects of mobile communications devices could adversely affect us through a reduction in sales of handsets or increased difficulty in obtaining sites for base stations.

Our net sales and costs are affected by fluctuations in the rate of exchange particularly between the euro, which is our reporting currency, and the US dollar and the Japanese yen as well as certain other currencies.

We operate globally and are therefore exposed to foreign exchange risks. Our policy is to monitor and hedge exchange rate exposure, and we manage our operations to mitigate, but not to eliminate, the positive or negative impact of exchange rate fluctuations. Exchange rate fluctuations may affect our sales growth and operating profit materially in future periods. See “Item 5.A Operating Results—Exchange Rates” and “Item 11. Quantitative and Qualitative Disclosures About Market Risk.”

In addition to the effect of exchange rate fluctuations on our results, an investor's return in US dollars from an investment in ADSs or shares may be affected by any depreciation of the euro because the value of dividends and other distributions paid in euro would decline as the value of the euro, expressed in US dollars, declines.

Our net sales derived from, and assets located in, emerging market countries may be adversely affected by economic, regulatory and political developments in those countries.

We generate net sales from and have invested in various emerging market countries. As net sales from these countries represent a significant portion of our total net sales, economic turmoil in these countries could adversely affect our net sales. Our investments in emerging market countries also may be subject to risks and uncertainties, including unfavorable taxation treatment, exchange controls, nationalization, inflation, currency fluctuations, or the absence or lack of regulation.

Changes in various types of regulation in countries around the world could affect our business adversely.

Our business is subject to direct and indirect regulation in each of the countries in which we or our customers do business. As a result, changes in various types of regulation could affect our business adversely. For example, it is in our interest that the Federal Communications Commission maintain a regulatory environment that ensures the continued growth of the wireless sector in the United States. In addition, changes in regulation affecting the construction of base stations and other network infrastructure could adversely affect the timing and costs of new network construction or expansion and the commercial launch and ultimate commercial success of these networks. Expensive government license fees can cause operators to incur substantial indebtedness and fundamentally affect operators' businesses, profitability and financial condition,

as well as the demands operators make on equipment suppliers such as Nokia. Moreover, implementation of new technological or legal requirements impacting our products and solutions, manufacturing or distribution processes could affect the timing of product introductions, the cost of our production or products as well as their commercial success. Finally, tariff, environmental and other regulation that adversely affects the pricing of new services could affect the sales of our products. The impact of these changes in regulation could affect our business adversely even though the specific regulations do not directly apply to us or our products. See “Item 4.B Business Overview—Government Regulation.”

Our share price has been and may continue to be volatile in response to conditions in the global securities markets generally and in the communications and technology sectors in particular.

Our share price has been subject to significant volatility, in part due to highly volatile securities markets, particularly for communications and technology companies’ shares, as well as developments from quarter to quarter in our sales, growth rate and operating margin. Factors other than Nokia’s results of operations that may affect our share price include, among other things, market expectations of our performance and projected volume growth in the mobile communications network and handset markets, the level of business activity or perceived growth (or the lack thereof) in the market in general, the performance of other technology companies, announcements by or the results of operations of our competitors, customers and suppliers, potential litigation involving Nokia or our industry, and announcements concerning the relative success or timetables of 3G mobile networks, products and services, as well as general market volatility. See “Item 9.A Offer and Listing Details” for information regarding the trading price history of our shares and ADSs.

ITEM 4. INFORMATION ON THE COMPANY

4.A History and Development of the Company

During our 136-year history, Nokia has evolved from a papermaking company to a conglomerate manufacturing multiple diverse products, and more recently to one of the world’s leading mobile communications companies. Nokia Corporation was formed in 1967 through the merger of three Finnish companies: Nokia Company, a wood pulp mill founded in 1865 on the banks of the Nokia River, Finnish Rubber Works Ltd, a manufacturer of rubber boots, tires and other consumer and industrial rubber products founded in 1898, and Finnish Cable Works, a manufacturer of cable for power transmission and telegraph and telephone networks founded in 1912.

Nokia entered the telecommunications equipment market in 1960 when an electronics department was established at Finnish Cable Works, which concentrated on the production of radio transmission equipment. At the same time, we began to pursue several other unrelated business operations in order to diversify our manufacturing activities and protect against economic cycles.

In the 1980s, we strengthened our position in the telecommunications, consumer electronics and personal computer markets through the creation and acquisition of a number of companies. We introduced the first fully digital local telephone exchange in Europe in 1982 and the world’s first car telephone for the Nordic Mobile Telephone analogue standard in 1984. In 1987, we acquired the consumer electronics operations and part of the components business of Standard Elektrik Lorenz of Germany, as well as the French consumer electronics company, Oceanic. At the beginning of 1988, we became Scandinavia’s largest information technology company when we acquired Ericsson’s information systems division.

In the early 1990s, we made a strategic decision to concentrate on telecommunications as our core business, with the goal of establishing a market-leading presence in every major global market. As a result, we began to divest our basic industry and non-telecommunications operations. During the period from 1989 to 1996, we sold our paper, personal computer, rubber, footwear, chemicals, power plant, cable, aluminum and television businesses.

We believe that Finland's openly competitive business climate and emphasis on innovation have contributed to our success. From the beginning of the telecommunications era, there have been several telecommunications operators in Finland, none of which was required or predisposed to purchase equipment from national suppliers. Finland's competitive marketplace initially permitted us to establish a market presence. Our need to export products to other markets to achieve growth, as well as our need to respond constantly to aggressive international competitors and customers, helped us to develop our business and products efficiently and build a leading competitive position.

Regulatory and technological advancements also have played a role in our success. The deregulation of the Finnish and European telecommunications industries since the late 1980s has stimulated competition and customer expectations. The technological breakthrough of GSM, which could carry data in addition to high quality voice, was followed by the European resolution, in 1987, to adopt GSM as the European digital standard by July 1, 1991. Finland met the deadline and the first GSM call was made with a Nokia phone over the Nokia-built network of Radiolinja. In the same year, we agreed to supply GSM networks to nine other European countries. During this period, GSM was also established as a standard in several Asian countries, opening important new markets for us. Our expertise in GSM technology has laid the foundation for our international success as a mobile network supplier.

Today, Nokia is comprised of Nokia Networks, Nokia Mobile Phones and Nokia Ventures Organization, as well as the common group functions, which include our corporate research unit, Nokia Research Center. In addition to being the leading mobile phone supplier in the world, Nokia is one of the world's leading providers of mobile, fixed broadband and Internet protocol, or IP, networks. For a detailed description of our business, see "Item 4.B Business Overview." We attribute much of our success to our unique corporate culture, which emphasizes and values product innovation, customer satisfaction and employees motivated by high levels of trust, independence and opportunities for personal and professional enrichment.

During 2001, we completed two strategic acquisitions. We acquired Ramp Networks, a US-based provider of purpose-built Internet security appliances specifically designed for small office applications. We also acquired Amber Networks of the United States. The company, which is being integrated with the Network Platforms business area of Nokia Networks, became the first to develop a fault-tolerant routing platform.

Nokia's aggregate capital expenditures totaled EUR 1,041 million in 2001, EUR 1,580 million in 2000 and EUR 1,302 million in 1999. These expenditures were primarily related to the expansion of our operational facilities. For further information regarding capital expenditures see "Item 5.A Operating and Financial Review and Prospects—Operating Results" and for a description of capital expenditures by business segment see note 2 to our consolidated financial statements included in Item 18 of this Form 20-F. We expect the amount of capital expenditures during 2002 to be slightly lower than in 2001 and to be funded from cash generated from operations.

Nokia maintains listings on six major securities exchanges. Our principal executive office is located at Keilalahdentie 4, P.O. Box 226, FIN-00045 NOKIA GROUP, Espoo, Finland and our telephone number is +358 (0) 7 1800-8000. Our agent in the United States is Nokia Inc., 6000 Connection Drive, Irving, Texas, 75039, and its telephone number is +1 (972) 894-5000.

4.B Business Overview

Nokia is a world leader in mobile communications. Our experience and innovation, combined with the user-friendliness, reliability and quality of our products and solutions have made Nokia the world's leading supplier of mobile phones and a leading provider of mobile, fixed broadband and IP networks. By adding mobility to the Internet, we create new communications products and services that enable companies to prosper and further enrich the daily lives of individuals.

For the 2001 financial year, Nokia's net sales totaled EUR 31.2 billion (USD 27.77 billion). At the end of 2001, we employed close to 54,000 people and had production facilities in nine countries, research and development activities in 14 countries and sales in over 130 countries, together with a global network of sales, customer service and other operational units.

Nokia is comprised of Nokia Networks, Nokia Mobile Phones and Nokia Ventures Organization, as well as the common group functions, which include our corporate research unit, Nokia Research Center.

- **Nokia Networks** is a leading provider of mobile, fixed broadband and IP network infrastructure and related services. Nokia Networks aims to be a leader in IP mobility core, radio and broadband access for network operators and providers. Nokia Networks also seeks to enable mobile multimedia and Internet applications, to achieve sustainable high value-added business with network operators and service providers and to become a preferred partner for global operators. In 2001, Nokia Networks represented approximately 24% of Nokia's net sales.
- **Nokia Mobile Phones** is the world's largest mobile phone manufacturer. With our comprehensive product portfolio covering all consumer segments and cellular protocols, we believe that Nokia is in a strong position to lead the development of mobile communications, based on our vision of a world in which a continuously increasing share of all personal communication—whether voice, text, images or multimedia, or services and transactions—occurs over personal wireless terminals such as mobile phones. We believe that the mobile phone is well suited to be the main application foundation and communication medium because it is made expressly to transmit information, it is easily personalized to meet individual needs and preferences, and it has penetrated every major global market. We seek to enable people to connect with one another and to various sources of services and information, regardless of time or place. In 2001, Nokia Mobile Phones represented approximately 74% of our net sales.
- **Nokia Ventures Organization** exists to create new business ideas outside the company's current focus as well as contribute to the growth of our existing core businesses. It identifies new business opportunities created by technological developments and operationalizes strategic new ideas. In addition, Nokia Ventures Organization provides seed financing for ideas from within the company and has invested in Nokia Venture Partners, the largest venture capital firm to invest exclusively in mobile and IP related start-up businesses and technologies on a global level. Through Nokia Internet Communications and Nokia Home Communications the division provides world-class Network Security and Virtual Private Network solutions that ensure the security and reliability of corporate enterprise and managed service provider networks, as well as digital platforms and communications solutions for the home environment. In 2001, Nokia Ventures Organization represented approximately 2% of our net sales.

During the course of a difficult year characterized by a competitive operating environment and compounded by a weakened global economy. Nokia Mobile Phones sales increased by 6% compared with the 2000 financial year, while sales of Nokia Networks decreased slightly by 2%,

compared with the previous year. This was largely a reflection of the adverse operating environment.

During 2001, we continued joint efforts with our peers to develop solutions for enabling the mobile services industry. In November, Nokia, together with 18 industry leaders, announced its commitment to the Open Mobile Architecture initiative. This industry-wide agreement on shared open standards and common platforms is expected to smooth the way for a global mass volume mobile services market, as well as bring greater freedom of choice for consumers. In this new open environment, we anticipate competition to take place, not only at the technology level, but also at the level of functionality and personal relevance.

Industry Overview

We compete in the global telecommunications industry in general and in the mobile industry in particular, each of which has exhibited rapid growth, change and convergence in recent years. However, the year 2001 was, after several years of rapid growth, a technology transition for the mobile industry. There was a decrease in total sales volumes of mobile phones globally and lower capital expenditure by operators compared with prior years resulting in the decline of the mobile infrastructure market as well as a significant change in realized versus anticipated growth rates.

The Communications Networks Industry

In today's communications industry, the Internet has established itself as a universal medium for access to all types of information. The Internet and digitalization of content bring additional traffic to communications networks and are the key enablers for the new services that we believe will drive future communications markets. IP, the technology behind the Internet, enables network operators and service providers to use cost-efficient transmission methods, such as packet data capability. This capability provides the means to deliver the enriched content that drives the development of new services.

Telecommunications networks are therefore undergoing fundamental changes: they are being converted from circuit switched to packet switched IP connectivity and from single purpose networks facilitating mainly voice transmissions to multi-service networks supporting various voice and non-voice interactions and applications. Internet and other IP-based applications and services are proving popular with both consumers and businesses, and we anticipate strong demand for a wide range of mobile services using third generation, or 3G, mobile networks as these services become commercially available.

During 2001, the total cellular network market decelerated and was slightly down from the previous year and the GSM market remained flat.

The transition from existing second generation networks to 3G networks is being driven primarily by two factors. First, enhanced mobile applications require the advanced technology of 3G networks to operate. Second, growth in wireless subscribers continues throughout the world and requires operators to upgrade their networks to support additional demand for capacity and quality. Operators are continuing their preparations for 3G networks and already approximately 60 have selected their 3G network vendors.

We believe new enabling technologies will enhance person-to-person communications greatly, create a new range of business-to-consumer information services and take intra-business communications to new levels. We also believe that the emergence of an instant information culture in today's society suggests that there is a ready market for personal mobile communications enhanced with visual content.

In fixed broadband networks, DSL continues to emerge as one of the key technologies to deliver high bandwidth applications to both business and residential customers worldwide. We believe market growth in the long-term will accelerate.

We expect the new multi-purpose networks to be more complex than traditional telecom networks, and that this will require the capability to integrate different elements in well-functioning systems and end-to-end solutions for mobile and fixed broadband networks. Today, operators or service providers can choose among a variety of 'best-in-class' solutions from different vendors for different network elements. In addition, infrastructure vendors with strong end-to-end capabilities will have an advantage because they will be able to offer their customers the ability to deliver seamless Internet and Intranet application services for all types of networks.

For information regarding anticipated future trends as well as Nokia's forecasts concerning the communications networks industry, see "Item 5.D—Trend Information."

The Mobile Phone Industry

In 2001, the mobile phone market showed an unprecedented growth slowdown. This was largely a result of challenging economic conditions in a year of technology transition. Both these contributed to a slower replacement market and lower sales volumes. The size of the mobile phone market is measured by the number of cellular subscriptions worldwide, as well as by the total annual sales volume of the industry.

Nokia estimates that the global mobile phone subscriber base at the end of 2001 totaled approximately 930 million, and expects this figure to rise to over one billion within the first half of 2002 and to reach 1.5 billion during 2005. Expectations are based on current subscriber growth rate estimates worldwide. Within this time frame, Europe is likely to remain the largest region in terms of the total number of mobile phone users, followed by Asia-Pacific, and then the Americas. Global penetration at the end of 2001 reached approximately 15%, with penetration having exceeded 80% in a number of European countries while reaching about 45% in the United States and more than 10% in China.

The mobile phone industry is currently estimated to be the world's largest consumer electronics industry measured by unit sales. We estimate that global mobile phone sales volumes during 2001 totaled approximately 380 million units, declining by 6% from approximately 405 million units in 2000.

In 2001, market sales volumes continued to rise in Asia-Pacific with about 15% market growth. Demand in the Americas is estimated to have remained at approximately the level of the previous year; in Europe, market sales volumes declined an estimated 23% during 2001.

Mobile phone replacement sales volumes have been spurred by the acceleration of technological developments and the broadening of consumer demand, which have contributed to shortened mobile phone lifecycles. However, in 2001, a majority of total handset market sales volumes still derived from users buying their first mobile phone.

In 2001, digital products accounted for approximately 99% of total mobile phone sales volumes. GSM continued to be the dominant cellular standard in the world, constituting more than 50% of global sales volumes in 2001. CDMA and TDMA digital protocols are the next most prevalent, representing approximately 18% and over 15%, respectively, of global sales volumes in 2001.

We see new growth opportunities in this industry as the functionality of mobile devices extends from a voice-centric approach to include media, imaging, entertainment and business applications as part of the transformation to 3G. At the same time, technologies such as Java, XHTML, packet

switching and multimedia messaging are becoming tangible reality in the form of new product categories and concepts.

Devices now coming on stream include imaging phones that also have cameras as well as phones that work as music players or game consoles. We believe these devices are contributing to the creation of entirely new communications markets.

For information regarding anticipated future trends as well as Nokia's forecasts concerning the mobile phone industry, see "Item 5.D—Trend Information."

The Internet Security Industry

Protection of corporate digital assets has become a top priority as companies expand information access to their employees, partners and customers. Maintaining the integrity and security of a company's information and protecting their network from unauthorized or fraudulent compromise requires the implementation of an effective security policy.

While companies continue to deploy various security solutions including firewalls, they are now expanding their deployments to include other security essential applications such as vulnerability assessment, intrusion detection, anti-virus and content security. Companies are also increasingly outsourcing the management of their complex corporate networks, including the configuration and administration of these systems on a continuing basis. In 2001, the slowdown in information technology spending led to a decline in this industry.

Business Strategy

Our business objective is to strengthen our position as a leading systems and products provider. Our strategic intent, as the trusted brand, is to create personalized communication technology that enables people to shape their own mobile world. We innovate technology to allow people to access Internet applications, devices and services instantly, irrespective of time and place. Achieving interoperability of network environments, terminals and mobile services is a key part of our objective.

We intend to capitalize on our leadership role by continuing to target and enter segments of the communications market that we believe will experience rapid growth or grow faster than the industry as a whole. By expanding into these segments during the initial stages of their development, we have established Nokia as one of the world's leading players in wireless communications and significantly influenced the way in which voice and other services have been transferred to a wireless, mobile environment. As demand for wireless access to an increasing range of services accelerates, we plan to lead the development and commercialization of the higher capacity networks and systems required to make wireless content more accessible and rewarding to the end user. In the process, we plan to offer our customers unprecedented choice, speed and value.

Nokia has a history of contributing to the development of new technologies, products and systems for mobile communications. Recent examples include: our commitment to open mobile architecture; the co-development of the new operating system for future terminals with Symbian; short-range wireless connectivity with Bluetooth; and wireless LANs for enabling local mobility in fixed LANs. In addition, we continue to be active in IP convergence. Nokia has established alliances with other service providers in order to make mobile access to services easier for the end user.

To achieve our business objective, our strategy focuses on:

- Being the preferred provider of products and solutions for mobile communications;
- Creating personalized communication technology;

- Driving open mobile architecture enabling a non-fragmented global mobile services market;
- Strengthening and leveraging Nokia, the trusted brand; and
- Expanding our business and market position on a global basis.

Being the preferred provider of products and solutions for mobile communications: We aim to position Nokia as the preferred provider of products and solutions for mobile communications by providing leading communications networks that enable end-to-end service delivery for both cellular and broadband networks. We develop leading high-capacity cellular networks, platforms and user applications for the mobile Internet, end-to-end broadband access solutions and Professional Mobile Radio systems.

Creating personalized communication technology: We want to strengthen our leadership position in converging personal digital terminal solutions. We use our understanding of user needs and our ability to meet and exceed user expectations to provide user-friendly, highly functional personalized products and solutions. We build on our core competencies in various key areas, including design and product innovations, brand development, and effective demand/supply network management, to bring new product concepts and associated services to market.

Driving open mobile architecture enabling a non-fragmented global mobile services market: We continue to employ open standards in our technology in order to promote open competition and interoperability. Our key commitment is to create a global and open mobile software and services market. We aim to achieve this through strong partnering with customers, suppliers and industry participants, and solid focus on end-to-end solutions in all our development activities. By driving open mobile architecture, our aim is to ensure the introduction of new, interoperable mobile Internet access and visual content downloading services worldwide, utilizing the GSM/GPRS evolution and coming 3G mobile communications networks adopting WCDMA technology. This is expected to boost innovation from independent software producers as well as provide consumers with a wide and varied selection of competitive, yet interoperable products and services.

Strengthening and leveraging Nokia, the trusted brand: According to a variety of consumer surveys, the Nokia brand is associated with well-designed, high quality and technologically advanced products and customer services that are also user-friendly. We have invested considerable resources in establishing the Nokia name as the leading brand in mobile communications. We intend to sustain and enhance the Nokia brand through aggressive advertising, sponsorship and other marketing activities in all of our principal markets. We believe that our leading market position provides significant opportunities for Nokia to better understand and respond to the usage patterns of end users, and thus enhance the Nokia brand.

Expanding our business and market position on a global basis: For more than a decade, we have actively expanded our business globally. As a result, our network systems, equipment and wireless terminals are produced and sold throughout the world. We therefore benefit from strong economies of scale throughout our organization.

Our strategy is to continue our focused pursuit of global business opportunities by cultivating a strong local presence in all growing markets and pursuing partnering and acquisition opportunities in order to obtain complementary technologies and market positions.

At Nokia, one of our top priorities is to continue to strengthen our leading market position in a profitable way. We believe that further market share gains are key to expanding our customer base and growing our future business potential. Our leading position also enhances the positive effects of our economies of scale, which we believe should strengthen our competitive position in the next generation of mobile communications.

Nokia Networks

Nokia Networks is a leading provider of mobile, fixed broadband and IP network infrastructure and related services. Nokia Networks aims to be a leader in IP mobility core, radio and broadband access for network operators and providers. Nokia Networks also seeks to enable mobile multimedia and Internet applications, to achieve sustainable high value-added business with network operators and service providers and to become a preferred partner for global operators. In 2001, Nokia Networks represented approximately 24% of Nokia's net sales.

Faster Internet connectivity via mobile phone networks is enabled primarily by packet switched technology, which is currently being introduced into cellular networks. We design and build networks based on GSM, GPRS, EDGE and WCDMA technologies, and our networks have been, or will be, installed in all major global markets that have adopted these standards.

Nokia has a leading position in GSM networks with approximately a 30% market share as of the end of 2001, based on company estimates of equipment sales. We also have a strong position in mobile IP and packet data networks and we are a leader in providing GPRS infrastructure, which brings IP packet data capabilities to mobile networks. Based on our total number of customers, which reached 59 at the end of 2001, Nokia has established a strong position as a leading provider of GPRS solutions to operators.

Nokia's 3G network coverage rollouts began in September 2001, with volume project deliveries to 35 operator customers by the end of the year. Volume project deliveries of 800 and 1900 MHz GSM/EDGE infrastructure to US customers commenced in December 2001. With these deliveries, we became the first 3G vendor to begin delivering EDGE network equipment in volumes. Revenues from network infrastructure projects are recognized on the percentage of completion method. For further information regarding revenue recognition see "Item 5.A Operating Results—Critical accounting policies" and note 3 to our consolidated financial statements included in Item 18 of this Form 20-F.

Nokia had 29 3G customers at the end of March 2002. As a result, we have gained a strong position in supplying 3G network infrastructure. In 2001, based on our estimates of equipment sales over the next two years, we strengthened our market position in 3G network infrastructure to over 30%, and we are confident that we have now achieved a market share at least as high as that of our nearest competitor. We are committed to seeing the very first Nokia-delivered 3G network in operation in September 2002, and intend to become the leading supplier of WCDMA networks on a global basis. Nokia's accessible 3G infrastructure market continues to grow as more operators join the WCDMA community and some significant US operators migrate from TDMA to GSM/EDGE based 3G solutions.

Nokia Networks enjoyed a number of notable successes during 2001 that reinforced its leading position, including:

- Entering into the largest infrastructure supply agreement ever for Nokia: an agreement valued at over USD 1 billion with Cingular Wireless in the United States to provide a significant portion of its nationwide GSM/EDGE network in the United States. This agreement further solidifies Nokia's leadership position in the US GSM market.
- Making considerable progress into the South American market by concluding a significant GSM deal with Telemar in Brazil.
- Entering into an agreement valued at EUR 1.5 billion with Orange SA to supply 3G networks to France, the United Kingdom and Germany, and making a breakthrough in Japan when J-Phone selected Nokia to supply its 3G networks. During the year, Nokia made 22 agreements to supply 3G networks to operators in eleven countries across three continents.

- Welcoming seven new GSM customers and concluding agreements for 23 GSM expansions during the year.
- Entering into agreements to supply DSL technology with operators in eight countries, including nine Chinese operators. New TETRA agreements were also made in Europe and Asia.

In response to adverse developments in the market and customer environment, Nokia realigned parts of its organizational structure in a move to increase overall efficiencies. This included decisions in both manufacturing and R&D to focus resources on high value-added parts of the business while outsourcing others. This is in line with Nokia's ongoing strategy of focusing and building on core skills while teaming up with select global partners.

Due to changes in the broadband market, and the slowdown in the US economy, Nokia's Broadband Systems division restructured its operations by focusing on a smaller number of key areas with closer synergies to other Nokia units and technology platforms. The division also concentrated its R&D network in fewer sites in order to adapt to the challenging market conditions and increased competition. Operating results in 2001 were also negatively impacted by a goodwill impairment of EUR 211 million and restructuring charges of EUR 116 million in Nokia Networks' Broadband Systems business.

Our business increasingly involves complex 3G networks. Not only has the industry invested significant amounts in developing and commercializing 3G technology, the total investment in 3G has increased substantially when the cost of purchased licenses and operator consolidations are included. Some operators have incurred significant indebtedness in connection with acquisitions of 3G licenses. In addition, some operators are early stage companies without an established customer base or revenue streams. As a result, some operators require their suppliers to arrange or provide long-term financing in relation to infrastructure projects. We expect operators to continue to look for customer financing, and we expect this type of financing to continue to be an important means in competing in the communications networks market.

We have extended a significant amount of customer financing to selected customers. The total aggregate value at December 31, 2001 of our committed customer financing was EUR 4,210 million, of which EUR 1,255 million was outstanding at the same date. Out of the outstanding customer financing, EUR 1,128 million was in respect of loans and EUR 127 million was in respect of financial guarantees. Of our committed customer financing at December 31, 2001, 86% was in respect of 3G networks. In 2001, we wrote off EUR 669 million in customer loans related to defaulted financings to Telsim, a GSM operator in Turkey and a further EUR 45 million related to the insolvency of Dolphin, a TETRA operator in the United Kingdom. See "Item 5.B Operating and Financial Review and Prospects—Liquidity and Capital Resources."

The current assessment of our customer market indicates that we do not expect our total committed customer financing to increase significantly. We expect the overall amount of our committed customer financing to increase by a small amount during 2002 as compared to the December 31, 2001 level. As a strategic market requirement, we plan to continue to extend customer financing to a small number of selected customers. However, should customer requirements, market or economic conditions change significantly, we may be required to increase materially the total amount of our committed customer financing. Outstanding customer financing is expected to increase in 2002 as customers draw on available financing. See "Item 3.D Risk Factors—Customer financing to network operators is a competitive requirement and can affect our net sales, profits, balance sheet and cash flow adversely."

We maintain a financing policy aimed at close cooperation with banks, financial institutions and Export Credit Agencies to support selected customers in their financing of infrastructure

investments. Our intent is to mitigate our exposure, market conditions permitting. We are seeking to make arrangements with financial institutions and investors to transfer part of the credit risk we have incurred from the commitments and outstanding loans we have made as well as from the financial guarantees we have given. We aim to offer pricing, instruments and documentation that are consistent with industry practice.

We primarily offer this type of financing at the early stages of projects, when we can influence the successful implementation and construction of the network, and as a complement to our core competencies only, rather than as a core business. The majority of our customer financing is to established network operators with an investment grade rating or to operators supported by other investment grade operators through ownership stakes and various operational and technical support (sponsors). However, there is no certainty that current sponsors will continue their investment with the operators, and sponsors generally do not provide financial guarantees on the loan balances. The credit ratings are determined by a major credit agency or equivalent as determined by Nokia if no ratings are available. Our exposure to start-up operators is substantially all to operators with investment grade sponsors. For further information regarding our customer financing exposures please see note 34b to our consolidated financial statements.

Our three main customers in terms of customer financing for 3G network systems are MobilCom AG in Germany, Hutchison 3G UK Ltd and Orange SA, including some of its subsidiaries and affiliates in a number of European countries. We have also committed to providing financing to customers purchasing 2G and other telecommunications technologies. Our main customer in terms of committed customer financing for 2G network systems is TNL PCS S.A. (Telemar) in Brazil.

The following table sets forth net sales, operating profit and average number of employees for Nokia Networks during the past three years.

Nokia Networks Net Sales, Operating Profit (Loss) and Average Number of Employees 2001

	Year ended December 31,		
	2001	2000	1999
	EURm, except average number of employees		
Net sales	7,534	7,714	5,673
Operating profit (loss)	(73)	1,358	1,082
Average number of employees	22,040	23,508	22,804

In addition, the following table sets forth the regional distribution of net sales for Nokia Networks during the same periods.

Nokia Networks Percentage of Net Sales by Region

	2001	2000	1999
Europe	51%	60%	68%
Americas	11%	7%	6%
Asia-Pacific	38%	33%	26%
Total	100%	100%	100%

Nokia Networks Business Divisions

Nokia Networks competes in four different business areas of the communications industry. Separate divisions within Nokia Networks address each of these areas.

- ***IP Mobility Networks*** develops mobile core and radio access network solutions, mobile messaging systems and service control platforms for network providers and operators. Our radio access network technologies include GSM, GPRS, EDGE, WCDMA as well as WLAN and Broadband Wireless. With respect to core networks, we develop circuit switched and packet switched solutions, offering both evolutionary and revolutionary paths to all-IP networks. Its customers include mobile network operators from around the world.
- ***Broadband Systems*** focuses on fast Internet networks, developing broadband DSL solutions for cost-effective, reliable and fast Internet access. Its customers include network providers and Internet service providers that serve both business and residential markets.
- ***Professional Mobile Radio*** develops digital TETRA networks for radio communications. Customers include professional users, such as public safety and security organizations, as well as utility and transportation companies.
- ***Operator Services*** consists of Delivery & Maintenance Services as well as Professional Services, and is responsible for advising on service provisioning and performance as well as implementing network operations.

In addition to these product development divisions, Nokia Networks encompasses Product Operations, which is responsible for the demand/supply chain of Nokia Networks products, including manufacturing, contract manufacturing and delivery of products. Customer Business Teams and Customer Account Teams are our interface to the customers and reflect both the operational strategies and organizational structure of our operator customers.

Nokia Mobile Phones

Nokia Mobile Phones designs and manufactures mobile phones for all major standards and customer segments in over 130 countries worldwide. Nokia introduced the world's first car phone for the Nordic Mobile Telephone analogue standard in 1984. It weighed approximately 10 kilograms, or 22 pounds, and was used primarily as a business tool. Today, one of our smallest models, the Nokia 8210, weighs a mere 79 grams, or 2.78 ounces. Our mobile phones are used daily by virtually every demographic segment of the population, not only as a communications device, but as a social staple and fashion accessory.

Nokia's comprehensive product portfolio consists of several categories catering for the very diverse sets of values, needs, lifestyles and preferences of our consumers. Up until now category evolution has revolved around voice-centric models, driven mainly by style related aspects. We believe that future product portfolio expansion will be driven by emerging functional categories, enabled by a number of new technologies such as Java, MMS and XHTML, and the evolution from second generation to 2.5 and 3G technologies.

Nokia's product matrix has six style dimensions (basic, expression, active, classic, fashion and premium) and five functional dimensions (voice, entertainment, media, imaging and business applications). The matrix helps Nokia identify potential new products in each cross-section of the two dimensions. By combining each of the styles with each of the functionalities, we should be increasingly able to address specific user needs. We believe for the different models to be successful, they need to be differentiated from one another by optimizing them for their primary usage.

We believe that the comprehensiveness and competitiveness of our product portfolio is one of the key reasons that Nokia has succeeded as the world's leading mobile phone manufacturer. A mobile phone manufacturer that aspires to achieve a leading global position must be able to offer attractive, personally relevant products to multiple user segments and for various primary usage needs.

Our value-adding strategy for continued market leadership is the ongoing addition of new features and functionality to our phones. This means introducing new models within existing product categories, while at the same time developing entirely new categories, such as the enhanced communicators, media phones and imaging phones.

Nokia's total product offering no longer includes just phones, but extends to include accessories such as intelligent Bluetooth devices; applications, like those available from www.nokia.com for the Nokia 9210 communicator; and services offered via Club Nokia.

Nokia Mobile Phones is organized according to vertically focused business units, global functions and geographical regions. A global network of research and development centers delivers product designs to nine regional manufacturing and distribution centers in eight countries. Customer sales are affected through local sales organizations. Nokia's mobile phones are sold primarily under the Nokia brand name, but occasionally are co-branded with an operator's brand.

Growth in our mobile phone sales in 2001 continued to exceed market growth, for the full year as well as quarterly. Overall, Nokia sold 140 million mobile phones into our distribution channels during 2001, compared with 128 million units in 2000, representing 9% year-on-year growth. Our sales volumes in 2001 continued to grow in all geographic regions, with growth strongest in Asia-Pacific. Consequently, Nokia continued to strengthen its market leadership throughout 2001, resulting in a global market share of approximately 37% for the full year 2001, based on Nokia's estimate of units sold into our distribution channels as a percentage of estimated aggregate retail unit sales.

We continue to enhance our leading mobile communications activities and currently are pursuing evolving technologies relating to our mobile communications business, including 3G mobile Internet applications and solutions.

We intend to attain a similar leadership position in 3G as we have achieved in second and 2.5 generation mobile phones, and expect to launch our first 3G mobile device in the third quarter of 2002.

In 2001, Nokia announced 22 new mobile phone models. Of these, 13 started shipping during the same year while the remaining nine were scheduled for shipment during the first half of 2002. By April, 2002, Nokia had announced an additional 15 new models for this year. The company has also announced that it plans to commence deliveries of a record number of new products during 2002.

The following table sets forth net sales, operating profit and average number of employees for Nokia Mobile Phones during the past three years.

Nokia Mobile Phones Net Sales, Operating Profit and Average Number of Employees

	Year ended December 31,		
	2001	2000	1999
	EUR million, except average number of employees		
Net sales	23,158	21,887	13,182
Operating profit	4,521	4,879	3,099
Average number of employees	27,320	27,353	20,975

The following table sets forth the regional distribution of net sales for Nokia Mobile Phones during the past three years.

Nokia Mobile Phones Percentage of Net Sales by Region

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Europe	48%	47%	45%
Americas	30%	32%	34%
Asia-Pacific	22%	21%	21%
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>

Products

Nokia Mobile Phones-New products launched in 2001

Digital Mobile Phones

<u>Product</u>	<u>System</u>	<u>Product category</u>
1. Nokia 9210	GSM 900/1800	Communicator
2. Nokia 3320	TDMA 800/AMPS dual-mode	Expression
3. Nokia 3360	TDMA 800/1900/AMPS tri-mode	Expression
4. Nokia 3280	CDMA 800/AMPS dual-mode	Expression
5. Nokia 3285	CDMA 800/1900/AMPS tri-mode	Expression
6. Nokia 8850 "Gold Edition" (Apac)	GSM 900/1800 (Apac)	Premium
7. Nokia 6310	GSM/GPRS 900/1800 (Apac)	Classic
8. Nokia 8310	GSM/GPRS 900/1800	Fashion
9. Nokia 3330	GSM 900/1800	Expression
10. Nokia 8887	CDMA 800 (Korea)	Expression
11. Nokia 8877	CDMA 1700 (Korea)	Expression
12. J-NM01	PDC (Japan)	—
13. Nokia 9290 Communicator	GSM 1900	Communicator
14. Nokia 8390	GSM/GPRS 1900	Fashion
15. Nokia 3395	GSM 1900	Expression
16. Nokia 5510	GSM 900/1800	Entertainment
17. Nokia 6360	TDMA 800/1900mHz/ AMPS	Classic
18. Nokia 7650	GSM 900/1800	Imaging
19. Nokia 6510	GSM 900/1800	Classic
20. Nokia 5210	GSM 900/1800	Active
21. Nokia 8855	GSM 900/1800 (Apac ONLY)	Premium
22. Nokia 6500	GSM 900/1800 (Apac ONLY)	Classic
23. Nokia 3350	GSM 900/1800 (Apac ONLY)	Expression

Other Products

Product	Description	
1. Nokia THR850	TETRA (Terrestrial Trunked Radio) phone	
2. Nokia 20	M2M (machine-to-machine) connectivity terminal	
3. Nokia 30	M2M (machine-to-machine) connectivity terminal (GPRS)	
4. Nokia Wireless Headset	Bluetooth accessory for cordless audio connection (e.g. Nokia 6310)	
5. Nokia Wireless Car Kit	Bluetooth accessory for full hands-free functionality in the car environment (e.g. Nokia 6310)	
6. Nokia Connectivity Card	Bluetooth accessory for cable-free connectivity with a PC (e.g. Nokia 6310)	

Nokia Mobile Phones-New products launched after December 31, 2001 and prior to April 30, 2002

Product	System	Product category
1. Nokia 6340	GSM/TDMA/AMPS	Classic
2. Nokia 9210c	GSM	Communicator
3. Nokia 8265	TDMA	Fashion
4. Nokia 8270	CDMA 1900	Fashion
5. Nokia 8910	GSM/GPRS	Premium
6. Nokia 9210i	GSM	Communicator
7. Nokia 6310i	Tri-band GSM/GPRS	Classic
8. Nokia 3410	GSM	Expression
9. Nokia 3510	GSM/GPRS	Expression
10. Nokia 3315	GSM	Expression
11. Nokia 6590	GSM 850/1900/GPRS	Classic
12. Nokia 6370	CDMA 1900	Classic
13. Nokia 7210	Tri-band GSM/GPRS	Fashion
14. Nokia 3590	GSM 850/1900/GPRS	Expression
15. Nokia 6385	CDMA 800/1900/AMPS	Classic
16. Nokia 3585	CDMA 800/1900	Expression

Mobile Software

In August 2001, the Mobile Software Unit was established within Nokia Mobile Phones, focusing on products and solutions for the mobile software and applications markets. The mission of the unit is to enable value-added services with seamless user experience and stimulate industry innovation and growth in the drive towards open standards and architecture. The Mobile Software Unit develops, markets and sells server-based solutions for operators, service providers and enterprises, as well as client software, such as the Series 60 terminal software platform and separate client terminal components, for other mobile handset manufacturers.

Nokia Ventures Organization

While Nokia's core business units invest heavily in their own new development, Nokia Ventures Organization exists to create new business ideas outside the company's current focus as well as to contribute to the growth of existing core businesses. The unit includes Insight and Foresight, New Growth Businesses, Nokia Venture Partners, and two established ventures: Nokia Internet Communications and Nokia Home Communications.

The Insight and Foresight unit identifies new business opportunities created by technological developments and operationalizes strategic new ideas. The New Growth Businesses unit develops strategic new business ideas, providing seed financing for business ideas from within the company. The unit has also invested in Nokia Venture Partners, a venture capital firm that invests exclusively in mobile and IP related start-up businesses and technologies on a global basis. Through Nokia Internet Communications and Nokia Home Communications, Nokia Ventures Organization provides world-class Network Security and VPN solutions that ensure the security and reliability of corporate enterprise and managed service provider networks, as well as digital platforms and communications solutions for the home environment.

In 2001, we took a number of steps to develop a leadership position in several of our Nokia Ventures Organization business units. Within our network security business, we strengthened our ability to offer full-service network security solutions with the acquisition of Ramp Networks, a California-based provider of purpose-built Internet security appliances for small office applications. A strategic global alliance with Checkpoint Software Technologies has also expanded our market leadership in mobile network security solutions for Nokia's corporate customers.

At the International Broadcasting Convention, Nokia and 10 of Europe's leading companies in the field of broadcasting, multimedia and communications announced a memorandum of understanding to promote the use of digital broadcast standards.

The following table sets forth net sales, operating profit (loss) and average number of employees for Nokia Ventures Organization during the past three years.

***Nokia Ventures Organization Net Sales, Operating Profit (Loss)
and Average Number of Employees***

	Year ended December 31,		
	2001	2000	1999
	EUR million except average number of employees		
Net sales	585	854	415
Operating profit (loss)	(855)	(387)	(175)
Average number of employees	2,155	2,222	1,256

Nokia Internet Communications provides network security and virtual private network (VPN) solutions designed to ensure the security and reliability of corporate enterprise and managed service provider networks. Our target markets for security and VPN offerings are enterprises and managed service providers.

By combining its IP Networking expertise with security applications from its industry partners, Nokia is able to create high-performance, reliable security appliance solutions that meet a broad range of network security needs. Nokia's Internet security portfolio includes the market's leading firewall and VPN solution, VPN-1®/FireWall-1® from Check Point Software Technologies, Ltd; the market's most popular intrusion detection offering, RealSecure™ for Nokia from Internet Security Systems, and the recently added, F5 Networks' industry leading iTCM solutions.

During the year, we strengthened our Internet security portfolio through a new partnership with F5 Networks. In the fourth quarter of 2001, the Nokia BIG-IP solutions were released, offering customers the ability to handle more traffic and achieve greater efficiencies with their existing infrastructure.

The acquisition of Ramp Networks brought with it Nokia's first office security appliances for small offices and remote workers. The Nokia IP51 and the IP71 security appliances complement Nokia's existing security appliance portfolio while broadening our reach of network and perimeter

protection to include organizations of all sizes. The Nokia IP530 and the gigabit plus performing Nokia IP740 security appliances were also introduced in 2001.

Nokia's expanded global alliance with Check Point Software Technologies during 2001 allows us to further our leadership in network security solutions for both wired and wireless network environments.

In 2001, revenue growth at Nokia Internet Communications was negatively affected by the slowdown in information technology spending and remained at approximately the same level as the previous year. As a result Nokia made a goodwill impairment of EUR 307 million related primarily to the acquisitions of Network Alchemy and Ramp Networks.

Revenues in 2001 at Nokia Home Communications were down significantly on the previous year based on product discontinuities, leading to restructuring. Lower-than-expected sales at this unit predominantly contributed to the overall decrease in sales at Nokia Ventures Organization. The unit develops digital home platforms and communications solutions based on IP technologies for the home environment, as well as digital satellite cable and terrestrial multimedia terminals for interactive applications. Nokia Home Communications combines digital broadcasting with other technologies from Nokia units to link our future broadcasting and IP appliances to satellite, cable and digital terrestrial networks.

Restructuring charges totaling EUR 110 million were incurred for both Nokia Internet Communications and Nokia Home Communications, the majority of which related to Nokia Internet Communications.

We established Nokia Venture Partners, the largest venture capital firm to invest exclusively in mobile and IP related start-up businesses and technologies on a global level. With USD 650 million under management, Nokia Venture Partners invests at an early stage with investments typically ranging between USD 2 to USD 10 million, depending on the stage of development, business model and industry category. Additional limited partners in the firm include Goldman Sachs, CDBWebTech and BMC Software, among others.

We have invested in the fund with the intent to gain exposure to markets and technologies beyond the reach of Nokia's current business unit strategies and early insight into new developments in the Internet economy.

Nokia Venture Partners has invested in more than 30 companies to date and has a proven track record of leveraging our combined resources, experience and contacts to help build successful businesses. We expect the global focus of the fund to help maintain our position at the forefront of the mobile Internet.

Research and Development

During 2001, we increased our R&D spending to EUR 3 billion, representing 9.6% of total net sales. We invest a substantial portion of our resources in research and development activities within our principal business units, as well as in our Nokia Research Center.

The research and development efforts of Nokia Networks are designed both to facilitate the timely introduction of new solutions and to enhance and upgrade existing products and solutions to meet the needs of operators and service providers. Several of Nokia Networks' products are based on Nokia-designed common platforms that are augmented with hardware and software designed to meet specific service requirements. Our use of standardized components enables us to avoid the extensive research and development costs necessary to develop proprietary hardware.

In research and development, Nokia Networks' main R&D focus is on mobile networks and on the development of all-IP based solutions. The principle is to focus on our own core competencies and

in other areas to cooperate with other industry leaders and universities. We have entered into several agreements with industry leaders to develop solutions and services for the wireless Internet and mobile e-business markets. During 2001, we announced the establishment of a new research and development center in Hangzhou, China, to develop platform technologies related to Nokia's 3G mobile networks. In addition, a collaboration agreement was announced with TietoEnator, in development activities related to mobile core networks.

Our mobile phone research and development strategy incorporates two aspects. First, we develop a standard platform incorporating characteristics and components that are often common across all mobile phone product lines. This platform includes industry standard components, such as microprocessors and semiconductors, which are purchased from outside suppliers. The second aspect involves the development of high value-added software and radio technology designed according to specific system standards. We believe this two-stage strategy enables Nokia Mobile Phones to offer a full product range covering all major cellular standards with the minimum amount of specialization of components. As a result of this strategy, we have been able to outsource most of our components for our mobile phones, while concentrating our efforts primarily on the development of high value-added software.

Management believes that the mobile phone industry will be characterized by increasingly diverse product lines in the future, as a result of the introduction of new product standards and the development of different product features tailored to the specific needs and lifestyles of various user groups. Future research and development challenges will include the development of mobile phones for evolving digital standards and the introduction of new products incorporating new data transmission platforms and applications.

An important aspect of our research and development activities relates to the safety of mobile phones. The World Health Organization has published an EMF Research Agenda, which recommends areas of further research that it believes must be explored in order to assess more accurately whether or not mobile phones pose a health risk. In 1998, Nokia and a number of other leading manufacturers pooled resources and created the Mobile Manufacturers Forum, a global association that supports research within a controlled framework in order to address the WHO's recommendations systematically.

Over the years, scientific research has been conducted with respect to the radio-frequency energy emitted by mobile phones and their base stations. Independent expert panels have reviewed the findings of this research and consistently concluded that there is no demonstrated health risk from these electromagnetic fields. We are, and will continue to be, committed to research into the use of electromagnetic fields. By contributing to high quality research programs globally, we support the development of a better scientific and public understanding of these issues.

Within Nokia Ventures Organization, research activities vary by business unit. Nokia Home Communications research and development activities focus on IP networking and Internet delivery in the home environment. Nokia Home Communications is also investing in both basic technology research and development of new products based on current and evolving market standards. Key technology areas include digital TV standards, such as the DVB standard, Multimedia Home Platform, or MHP, and Advanced Television Enhancement Forum, or ATVEF, specification.

Nokia Internet Communications focuses its research and development activities on network security. This includes TCP/IP networking, IPSec and operating system software, IP clustering and firewall technologies. Nokia Internet Communications also carries out development activities in the network management area.

Nokia Research Center, the corporate research unit, strives to enhance Nokia's technological competitiveness and propel its renewal through world-class leadership in technology areas vital to

the company's future success. Interacting closely with all Nokia business units, the research center drives and supports Nokia's evolving core businesses by developing new concepts, technologies and applications. With the responsibility to focus beyond current product development, the research center aggressively develops evolving technologies, also acting as an incubator for new technology-oriented ventures.

To keep up to date with and influence the latest technological developments around the world, Nokia Research Center maintains strong global contacts. It actively participates in standardization work and various international R&D projects in cooperation with universities, research institutes and other companies.

Nokia believes that effective research and development is vital to remaining competitive in the industry. As of December 31, 2001, we employed 18,600 people in the area of research and development, representing approximately 35% of Nokia's total workforce.

Production

Nokia operates 19 manufacturing facilities in nine countries around the world at December 31, 2001. Our principal supply requirements are for electronic components, such as semiconductors, microprocessors, micro controllers and memory devices, which have a wide range of applications in our communications products. Our products also incorporate software provided by third parties. Although we have not experienced significant shortages of components to date, from time to time suppliers may extend lead times, limit supplies or increase prices due to capacity constraints or other factors.

Nokia Networks had seven production facilities at December 31, 2001: four in Finland and three in China. In line with our strategy to invest resources in key areas in order to improve efficiency, over 60% of Nokia Networks' production is currently outsourced, as well as some support activities. In 2001, SCI Systems, Inc. acquired Nokia Networks' manufacturing business in Haukipudas, Finland and in Camberley, United Kingdom.

Nokia Networks sources some components for its telecommunications systems from a single or a small number of selected suppliers. Management believes that these business relationships are stable and typically involve a high degree of cooperation with respect to research and development, product design and manufacturing in order to ensure optimal interoperability of products. See "Item 3.D Risk Factors—We depend on our suppliers to deliver fully functional components on time and their failure to do so could adversely affect our ability to deliver our products successfully and on time."

Some components and subassemblies for Nokia Networks' products, including Nokia-specific integrated circuits and radio frequency components, servers, subassemblies such as filters, combiners and power units, cabinets and Nokia-specific connectors, are sourced and manufactured by third party suppliers. Our strategy is to focus on core competencies in our own operations and to work together with world-class companies in areas outside these core areas. This strategy enhances our flexibility and reaction speed, and helps to further increase our competitiveness in the telecommunications infrastructure market. We then assemble components and subassemblies into final products and solutions.

Consistent with industry practice, we manufacture our telecommunications systems on a contract-by-contract basis. In 2001, Nokia Networks' order inflow was EUR 8,204 million, a decrease of 7% compared to its order inflow in 2000.

We consider our mobile phone manufacturing to be a core competency and competitive advantage. Nokia Mobile Phones currently operates nine manufacturing plants in nine countries. Our US plant primarily supplies the American markets, as do our manufacturing plants in Mexico

and Brazil. Three European plants, located in Finland, Germany and Hungary, supply principally the European market and non-European countries that have adopted European mobile phone standards. We have two plants in China and one in South Korea that primarily supply the Asian markets. We use outsourcing to complement our manufacturing activities. Outsourcing covers an estimated 20% of our manufacturing volume of mobile phones currently and we do not expect it to represent more than this in the future.

In the past several years, we have made significant capital expenditures in order to automate our mobile phone manufacturing facilities further. Each of our mobile phone plants contains state-of-the-art technology and is highly automated. Although our plants generally manufacture in accordance with the technical standards of local geographic markets, each plant is capable of providing mobile phones for most of the world's major standards. As a result of this capability, we believe we are able to respond rapidly to the needs of different geographic markets. In order to increase flexibility, contract manufacturing for accessories and mobile phone assembly may be used.

Consistent with industry practice, we source a large portion of components for our mobile phones from a global network of suppliers. Although these components may experience some price volatility from time to time, we purchase the majority of our components through long-term contracts. As is the case with suppliers to Nokia Networks, management believes that these business relationships are stable and typically involve a high degree of cooperation with respect to research and development, product design and manufacturing. See "Item 3.D Risk Factors—We depend on our suppliers to deliver fully functional components on time and their failure to do so could adversely affect our ability to deliver our products successfully and on time." Most raw materials that are used in Nokia mobile phone products, including semiconductor chips, keypads, displays, covers and plastic casings, are sourced and manufactured by third party suppliers. We then assemble these components and activate the phone with our own software.

We aim to manage our inventory of components to achieve the level of production required to meet the demand for our products, while minimizing inventory-carrying costs. The inventory level of components that we maintain is a function of a number of factors, including estimates of demand for each product category, product price levels, the availability of raw materials, supply chain integration with suppliers, and the rate of technological change. From time to time, our inventory levels of components may differ from actual requirements.

Nokia Ventures Organization has outsourced the production of multimedia terminals and Internet security products to third party contract manufacturers with factories in Mexico, the United Kingdom, the United States and Sweden. In addition, it has a joint venture to manufacture multimedia terminals in China. The other business units of Nokia Ventures Organization do not engage in manufacturing activities as their products are still under development.

Marketing Channels

Aggressively marketing the Nokia brand is a critical component of our overall corporate strategy. According to a survey conducted in July 2001 by Interbrand, the Nokia brand was recognized by participants as the fifth most valued brand in the world. We have invested heavily in print and broadcast advertising, such as our "Connecting People" campaign, as well as sponsorship of a variety of sporting and leisure events, including the United States college football Nokia Sugar Bowl. We also promote our products by sponsoring movies in which Nokia phones feature prominently among the lead characters.

The core of Nokia Networks' marketing and sales channels comprise dedicated global account management teams for operator customers. Product marketing is carried out primarily through our own campaigns and promotions.

Nokia Mobile Phones' consumer marketing utilizes a comprehensive mix of print and broadcast media, point-of-sale support material and the Internet. A special, and increasingly important, feature is Club Nokia, a customer relationship marketing and customer loyalty channel available over Nokia handsets and the Internet to provide service, advice, special offers and games for existing customers. Our sales and distribution channels include operators, distributors and independent retailers. As is the case with Nokia Networks, product marketing is done partly through our own campaigns and sales promotions and partly through initiatives driven by operator and distributor customers, such as the inclusion of a subsidized Nokia phone with an operator's calling program.

As the popularity of mobile phones increases worldwide, manufacturers must address an extremely varied audience with their marketing communications. Different dimensions of identified user segments, beyond geographic and cultural dimensions, must be considered. We believe that we are able to reach out to people with relevant messages because we have developed an expertise in understanding user needs and behaviors, incorporating a sound consumer segmentation methodology. This methodology evaluates a variety of factors relevant to our mobile phone users, including the benefits that users hope to derive from their mobile device, and their lifestyle, demographics and psychological profiles.

Corporate Responsibility

It is widely accepted that mobile communications have a lot to offer sustainable development, because they reduce energy consumption, offer an opportunity to reduce use of materials and waste, promote personal networking and enable widespread information without traditional time or location constraints.

But individual companies have a significant effect on the extent of this positive impact; for instance, how well mobile communications will help bridge the digital divide, how they will preserve or stimulate economic and social well-being, how adverse effects on the environment will be minimized, how human rights will be protected within our own company and in our supply chain, how globalization of communications can work for people not against them, and how the industry sector as a whole will promote sustainable development.

It makes business sense to look after the markets we operate in, to anticipate risks, demonstrate company values, work at increasing employee satisfaction, enhance corporate governance principles, protect the Nokia brand and build a reputation for citizenship, to improve company efficiency and to meet emerging market needs. As market leader and a leading world brand, Nokia endeavors to earn stakeholders' trust in its company and products in everything it does, throughout the world.

Nokia is actively participating in several international initiatives, such as those of Global Compact, UN ICT Task Force, International Youth Foundation, World Business Council for Sustainable Development and WWF. We are also introducing a range of communication channels to explore ethical issues with both internal and external stakeholders.

As a result of this work in economic, environmental and social issues, and increased transparency in reporting, we have been included in SRI (Socially Responsible Investment) benchmarks, such as Dow Jones Sustainability Indexes and the FTSE4Good.

Employee Development—The “Nokia Way”

Fundamental to our success is the “Nokia Way” for all personnel. The Nokia Way is a philosophy of attracting and retaining the best people and maintaining continuous renewal. We strive to instill in each employee a set of four core values—customer satisfaction, respect for the individual,

achievement, and continuous learning—that we believe are critical for a global organization such as Nokia to work together effectively. In addition, our management cultivates an attitude of trust, responsibility and open-mindedness, which allows them to build teams of independent entrepreneurs that are permitted to take chances and even make occasional mistakes. The result is a culture in which decisions can be, and are, made quickly, and employees are energized and driven by a desire to win. We believe that this type of corporate culture is essential for us to prevail in the rapidly changing mobile communications industry.

Competition

Our principal competitors on a global basis currently include Motorola, Ericsson, Siemens and Samsung, although we also compete with a variety of other companies.

Our principal competitors in the networks business include Alcatel, Ericsson, Motorola, Nortel and Siemens. Competition among vendors is increasingly intense as operators make additional investments in GSM and select new vendors in connection with developing their 3G businesses.

The mobile phone market is also very competitive. We face challenges from other established market participants, as well as new entrants, including those that traditionally focused on different segments of the consumer electronics industry. The competitive environment is characterized by rapid changes in both technology and markets. See “Item 3.D Risk Factors—Changes in the communications industry are expected to increase competition and change the competitive landscape and may affect our operating results negatively.”

Mobile phone manufacturers compete with one another from widely differing positions. Nokia alone has a market share of approximately 37%, based on our estimate of units sold in 2001 into our distribution channels as a percentage of estimated aggregate retail unit sales. This represents roughly the combined share of the four next biggest manufacturers. In terms of global market share, Motorola is Nokia’s primary competitor with an estimated market share of approximately 15% in 2001. Manufacturers in the third tier each held an estimated global market share of 6-7% and include Ericsson, Siemens and Samsung. The rest of the competition consist of a large number of other manufacturers, including NEC, Panasonic, Kyocera, Alcatel, Mitsubishi and Goldstar, each with an estimated market share of up to a few percentage points on a global basis. These ten manufacturers, together with Nokia, are estimated to represent more than 85% of the global mobile phone sales. The remaining part is divided among a large number of companies.

We compete in our different product markets based on a number of factors, including, among other things, price, technical performance, product features, availability, product quality, sales and technical support, and brand recognition. Our ability to compete successfully depends on factors both within and outside of our control in our most important markets. These include successful and timely development of new products, product performance and quality, manufacturing efficiency, product availability, customer service, pricing, industry trends and general, as well as country-specific, economic factors and other country-specific or market related factors, such as changing regulatory or government policies.

Seasonality

Our network business has experienced some seasonality during the last few years. Sales have been highest in the last quarter of the year compared to the first quarter of the following year, due to operators’ planning and budgeting reasons. However, this pattern might change as new markets evolve.

Our mobile phone sales are also somewhat affected by seasonality. Historically, the first quarter of the year is characterized by slightly lower sales growth than the fourth quarter, due to the effect

of Christmas sales. The second quarter of the year is also typically another high season, as consumers prepare for summer vacations. The third quarter is usually slower than the second and fourth quarters, as consumers postpone purchases until the Christmas season.

Patents and Licenses

The detailed designs of our products are based primarily on our own research and development, work and design and comply with all relevant public standards. We aggressively seek to safeguard our investments in technology through adequate patent protection including design patents, trademark registrations and copyrights which are used to protect proprietary features of our products. In 2001, we filed new patent applications for more than 1,200 new inventions.

Nokia is a holder of several essential patents for various telecommunications standards. An essential patent covers a feature that is incorporated into a public standard that all manufacturers are required to meet. In accordance with the rules of standardization bodies such as the European Telecommunication Standardization Institute, we are committed to promoting open standards by granting licenses on a fair, reasonable and non-discriminatory basis. We have entered into several license agreements with other companies relating to essential patents and other patents. Many of these agreements are cross-license agreements with major telecommunications companies that cover broad product areas and guarantee Nokia commercial freedom of action in global markets.

Despite the steps that we have taken to protect our intellectual property rights, we cannot be certain that any rights or pending applications will be granted or that the rights granted in connection with any future patents will be sufficiently broad to protect our technology. Any patents that are granted to us may be challenged, invalidated or circumvented, and any right granted under our patents may not provide competitive advantages for Nokia.

In addition, with the introduction of 3G, mobile data and other evolving technologies, our products increasingly include complex technological solutions that incorporate a variety of patented and proprietary technologies. A 3G mobile handset, for example, may incorporate three times as many components, including substantially more complex software, as our GSM phones. As the number of entrants in the market grows, as the Nokia product range becomes more diversified, and as the complexity of the technology and the overlap of product functionalities increase, the possibility of an inadvertent infringement and related intellectual property claim against us increases. There may be patents and patent owners relevant to our product lines that are unknown to us. In addition, although we endeavor to ensure that companies that work with us possess appropriate intellectual property rights, we recognize that we cannot fully avoid risks of intellectual property rights infringement created by companies with which we work in cooperative research and development activities. Similarly, we or our customers may face claims of infringement in connection with our customers' use of our products and solutions. It is therefore more likely that we will be required to obtain additional licenses or that some of the components in these handsets will be protected by intellectual property rights of which we are unaware, potentially causing us to infringe the rights of others inadvertently.

The business models for 3G mobile services have not yet been established in many aspects. The unavailability of licenses for copyrighted content, delayed negotiations or restrictive copyright licensing terms may have an adverse effect on the cost or timing of content-related services by us, operators or third party service providers, and may also indirectly affect the sales of our handsets.

From time to time we receive patent claims from third parties. We believe that, based on industry practice, any necessary licenses or rights under patents that we may require can be obtained on terms that would not have a material adverse effect on our business, operating results or financial condition. Nevertheless, necessary licenses may not be available on acceptable terms, if at all. The inability to obtain necessary licenses or other rights or the need to engage in litigation could have

a material adverse effect on our business, operating results and financial condition. See “Item 3.D Risk Factors—Third party claims that we have infringed their intellectual property rights could result in costly and time-consuming litigation or the invalidation of intellectual property rights on which we depend.”

Government Regulation

Our products are subject to various Federal Communications Commission regulations in the United States. FCC regulation of the commercial mobile radio service industry has a direct and substantial impact on our business. It is in our interest that the FCC maintain a regulatory environment that ensures the continued robust growth of the wireless sector in the United States. FCC type acceptance regulations require that our products meet specified radio frequency emission standards and not cause unallowable interference with other services. It is very important to our business that the FCC, along with other US government agencies, take actions to ensure that sufficient spectrum is made available to meet the demand for advanced, next generation, wireless services. In addition, a continued deregulatory and pro-competitive approach by the FCC and other agencies toward the Internet and the delivery of advanced communications services should allow us to expand our business operations by offering businesses and consumers new and innovative communications products and services. We believe that our products comply with all applicable regulations.

EU regulation in many areas has a direct effect on the business of Nokia and our customers within the single market of the European Union. In February 2002, the Council of Ministers adopted a telecommunications package consisting of four directives that provide a new harmonized EU regulatory framework for all types of electronic communication networks and services. The directives in this package aim to increase competition in the communications sector. They include a framework directive on electronic communications and services and three specific directives on authorization, access and interconnection, and universal service and users’ rights. EU Member States have 15 months to implement these directives into their national laws. A related draft directive on privacy and data protection still needs to be agreed between the European Parliament and the Council of Ministers. In addition, in recent years, a number of EU regulatory measures have been introduced to open telecommunications competition and to address consumer protection and environmental policy issues relating to the sector. We are in a continuous dialogue with the EU institutions through our experts, industry associations and our office in Brussels.

Our business is subject to regulation directly and indirectly in each of the countries in which we (or our customers) do business, and changes in various types of regulation could affect our business adversely. For example, changes in regulation that impose more stringent, time-consuming or costly planning, zoning or building approval requirements affecting the construction of base stations and other network infrastructure could affect the timing and costs of new network construction or expansion and the commercial launch and ultimate commercial success of these networks. Expensive government license fees can cause operators to incur substantial indebtedness and fundamentally affect operators’ businesses, profitability and financial condition, as well as the demands operators make on equipment suppliers such as Nokia. Regulations that mandate the use of particular copy-protection technologies or digital rights management technologies in our products to protect copyright owners may affect the timing and cost of new products. Statutory fees, such as copyright levies or statutory royalties, that may be authorized under copyright laws or related statutes, imposed on our products having memory and/or the capability to copy copyrighted content may affect the cost of new products. Finally, environmental and other regulations that apply to the pricing of new services could affect the sales of our products. The impact of these changes in regulation could adversely affect our business even though the specific regulations do not directly apply to us or our products.

4.C Organizational Structure

The following is a list of Nokia's significant subsidiaries as of December 31, 2001:

<u>Company</u>	<u>Country of Incorporation</u>	<u>Nokia Ownership Interest</u>	<u>Nokia Voting Interest</u>
Nokia Inc.	United States	100%	100%
Nokia GmbH	Germany	100%	100%
Nokia UK Limited	England & Wales	100%	100%
Nokia TMC Limited	South Korea	100%	100%
Beijing Nokia Mobile Telecommunications Ltd	China	50%	50%
Nokia Finance International B.V.	The Netherlands	100%	100%
Nokia Komárom Kft	Hungary	100%	100%
Nokia do Brazil Tecnologia Ltda.....	Brazil	100%	100%
Nokia Italia Spa	Italy	100%	100%
Nokia France S.A.	France	100%	100%
Dongguan Nokia Mobile Phones Company Ltd	China	70%	70%
Beijing Nokia Hang Xing Telecommunications Systems Co. Ltd	China	69%	69%

4.D Property, Plants and Equipment

At December 31, 2001, Nokia owned 19 manufacturing facilities in nine countries around the world. None of these facilities is subject to a material encumbrance. Following is a list of their location, use and capacity:

Country	Location and Product	Productive Capacity, Net m ²
BRAZIL	NG Industrial Limitada, Manaus (digital and analog cellular phones)	6,582
CHINA	Beijing Nokia Hang Xing Telecommunications Co Ltd, Beijing (switching systems, base station controllers, transcoders)	8,500
	Beijing Nokia Mobile Telecommunications Co Ltd, Beijing (base stations and mobile phones)	55,000
	ChongQing Nokia Telecommunications Ltd, ChongQing, (access products for fixed networks)	8,500
	Dongguan Nokia Mobile Phones Company Ltd, Dongguan (mobile phones)	22,000
	Fujian Nokia Mobile Communications Technology Co, Ltd, Fujian (technical services for mobile networks)	1,100
	Nokia Citic Digital Technology Co (Beijing) Ltd, Beijing (multimedia terminals)	1,200
	Nokia (Suzhou) Telecommunications Co, Ltd, Suzhou (base stations and cellular network transmission products)	13,000
FINLAND	Nokia Mobile Phones, Salo (mobile phones)	58,908
	Nokia Networks, Espoo (switching systems, base station controllers, transcoders)	4,999
	Nokia Networks, Espoo (radio access products)	9,017
	Nokia Networks, Limingantulli (plug-in units for both GSM and WCDMA base station product families)	8,358
	Nokia Networks, Rusko (base stations)	12,178
GERMANY	Nokia Mobile Phones Produktions GmbH, Bochum (mobile phones)	16,517
HUNGARY	Nokia Komárom (mobile phones)	12,613
MEXICO	Nokia Mexico S.A. de CV, Tampas (mobile phone batteries, mobile phones)	4,041
REPUBLIC OF KOREA	Nokia TMC Ltd, Masan (mobile phones)	32,789
UNITED KINGDOM	Nokia UK Ltd, Fleet (mobile phones—not operational until July 2002)	1,965
UNITED STATES	Nokia Inc. (Alliance), Fort Worth, Texas (mobile phones)	14,419

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

5.A Operating Results

The following discussion and analysis by management of our operating and financial results should be read in conjunction with our consolidated financial statements included in Item 18 of this Form 20-F. Our consolidated financial statements and the financial information discussed

below have been prepared in accordance with IAS. For a discussion of the principal differences between IAS and US GAAP, see “—Principal Differences between IAS and US GAAP” and note 37 to our consolidated financial statements.

Business segment data in the following discussion and analysis is prior to inter-segment eliminations. See note 2 to our consolidated financial statements.

Introduction

At Nokia, one of our top priorities is to continue to strengthen our leading market position in a profitable way. We believe that further market share gains are key to expanding our customer base and growing our business in the future. Our leading position also enhances the positive effects of our economies of scale, which we believe should strengthen our competitive position in the next generation of mobile communications. We have invested heavily in research and development, introducing new products and creating increased consumer recognition of the Nokia brand name. In addition, we have expanded the global reach of our operations substantially by establishing manufacturing facilities, distribution centers and sales and support services in a number of our markets. We currently have manufacturing facilities in nine countries and research and development personnel in 14 countries and supply our products in over 130 countries worldwide. In 2001, 49% of our net sales originated from Europe, 26% from Asia-Pacific, and 25% from the Americas. Based on sales, the ten largest markets in 2001 were the United States, China, the United Kingdom, Germany, France, Italy, the Philippines, Thailand, Brazil and Spain, representing 63% of total sales in the aggregate.

For further information regarding our business and operations please see “Item 4—Information on the Company.”

Critical accounting policies

Our accounting policies affecting our financial condition and results of operations are more fully described in note 1 to our consolidated financial statements included in Item 18 of this Form 20-F. Certain of Nokia’s accounting policies require the application of judgment by management in selecting appropriate assumptions for calculating financial estimates, which inherently contain some degree of uncertainty. Management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the reported carrying values of assets and liabilities and the reported amounts of revenues and expenses that may not be readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Nokia believes the following are the critical accounting policies and related judgments and estimates used in the preparation of its consolidated financial statements.

Revenue recognition

The majority of Nokia Networks’ revenue is derived from projects involving the customization, installation, commissioning and integration of complex telecommunications equipment, such that sales and costs from these projects are recognized on the percentage of completion basis. Completion is measured using either the cost-to-cost input method or the milestone output method, depending upon the nature of the individual project and the most applicable measure of progress. The percentage of completion method relies on estimates of total expected contract revenue and costs, as well as dependable measurement of the progress made toward completing that project. Recognized revenues and profit are subject to revisions during the project in the event assumptions regarding the overall project outcome are revised. Changes in total profit

estimates relating to past periods are included in income in the periods in which the facts that give rise to the revision become known. Revenue recognition on initial third generation network contracts begins upon successful delivery of the first operational phase of the network as revenue is not considered earned until specified milestone functionality is achieved. Prior to reaching this milestone, costs incurred are recorded as project work in progress. These costs amounted to EUR 258 million at December 31, 2001.

Nokia Mobile Phones' and Nokia Ventures Organization's as well as certain of Nokia Networks' revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed and determinable and collectibility is probable. This requires us to assess at the point of delivery whether these criteria have been met. Upon making such assessment revenue is recognized. In particular, Nokia records estimated reductions to revenue for customer programs and incentive offerings including special pricing agreements, price protection and other volume based incentives mainly in the mobile phone business. If market conditions were to deteriorate, Nokia may take actions to increase customer incentive offerings for future sales, possibly resulting in an incremental reduction of revenue at the time the incentive is offered.

Customer financing

We have extended a significant amount of customer financing to selected customers. In establishing the arrangements, management must assess the creditworthiness of the customer and the timing of cash flows expected to be received under the arrangement. This judgment relies upon prudent and conservative credit policies consistent with market practice. However, should the actual customer or economic conditions differ from our assumptions, we may be required to re-assess the ultimate collectibility of such financings. Our assessment of the net realizable value considers the collateral and security arrangements of the receivable as well as the likelihood and timing of estimated collections. See note 34(b) to our consolidated financial statements for a further discussion of customer long-term loans.

Allowances for doubtful accounts and obsolete inventory

We maintain allowances for doubtful accounts for estimated losses resulting from the subsequent inability of our customers to make required payments. If the financial conditions of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Management specifically analyses accounts receivables and analyses historical bad debt, customer concentrations, customer creditworthiness, current economic trends and changes in our customer payment terms when evaluating the adequacy of the allowance for doubtful accounts.

We periodically review the lower of cost or market carrying value of inventory. This requires management to estimate the market value based upon assumptions about future demand and market conditions. Any difference between the cost of inventory and the estimated market value results in a write-down of inventory for the estimated obsolescence or unmarketable inventory. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Warranty provision

We consistently provide for the estimated cost of product warranties at the time revenue is recognized. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates (field failure rate), material usage or service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage

or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required. Our warranty provision is established on our best estimates of the amounts necessary to settle future and existing claims on products sold as of the balance sheet date. While we believe that our warranty provision is adequate and that the judgment applied is appropriate, such amounts estimated to be due and payable could differ materially from what will actually transpire in the future.

Minority investments

We hold minority interests in companies having operation or technology in areas within our strategic focus, some of which are publicly traded and have highly volatile share prices. We record an impairment charge when we believe an investment has experienced a decline in value that is other than temporary. Future adverse changes in market conditions or poor operating results of underlying investments could result in losses or an inability to recover the carrying value of the investments that may not be reflected in an investment's current carrying value, thereby possibly requiring an impairment charge in the future.

Capitalized development costs

We capitalize certain development costs when it is probable that a development project will be a success, and certain criteria, including commercial and technological feasibility, have been met. These costs are then amortized on a systematic basis over their expected useful lives. During the development stage, management must estimate the technical feasibility of these projects as well as their expected useful life. Should a product fail to substantiate its estimated feasibility or life cycle, we may be required to write-off excess development costs in future periods.

Valuation of long-lived and intangible assets and goodwill

We assess the carrying value of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that such carrying value may not be recoverable. Factors we consider important, which could trigger an impairment review, include the following:

- significant underperformance relative to expected historical or projected future results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business; and
- significant negative industry or economic trends.

When we determine that the carrying value of intangibles, long-lived assets and goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate determined by our management to commensurate with the risk inherent in our current business model.

This review is based upon our projections of anticipated future cash flows. While we believe that our assumptions are appropriate, such amounts estimated to be due and payable could differ materially from what will actually occur in the future.

Deferred taxes

Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities and any valuation allowance recorded against net deferred tax assets. Nokia records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. While Nokia has considered future taxable income and

ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event Nokia were to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to the deferred tax assets would increase income in the period such determination was made. Likewise, should Nokia determine that it would not be able to realize all or part of its net deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to income in the period such determination was made.

Pensions

The determination of our obligation and expense for pension benefits is dependent on our selection of certain assumptions used by actuaries in calculating such amounts. Those assumptions are described in note 5 to our consolidated financial statements and include, among others, the discount rate, expected long-term rate of return on plan assets and annual rate of increase in future compensation levels. Actual results that differ from our assumptions are accumulated and amortized over future periods and therefore, generally affect our recognized expense and recorded obligation in such future periods. Our assumptions are based on actual historical experience and external data regarding compensation and discount rate trends. While we believe that our assumptions are appropriate, significant differences in our actual experience or significant changes in our assumptions may materially affect our pension obligation and our future expense.

Results of Operations

The following table sets forth the net sales and operating profit for our business groups for the years indicated.

Net Sales and Operating Profit by Business Group

	Year ended December 31,					
	2001		2000		1999	
	Net Sales	Operating Profit/(Loss)	Net Sales	Operating Profit/(Loss)	Net Sales	Operating Profit/(Loss)
	EURm					
Nokia Networks	7,534	(73)	7,714	1,358	5,673	1,082
Nokia Mobile Phones	23,158	4,521	21,887	4,879	13,182	3,099
Nokia Ventures Organization ⁽¹⁾	585	(855)	854	(387)	415	(175)
Common Group Functions ⁽¹⁾	—	(231)	—	(74)	—	(98)
Discontinued Display Products ⁽¹⁾	—	—	—	—	580	—
Eliminations	(86)	—	(79)	—	(78)	—
Total	<u>31,191</u>	<u>3,362</u>	<u>30,376</u>	<u>5,776</u>	<u>19,772</u>	<u>3,908</u>

⁽¹⁾ Prior to January 1, 2000, the businesses of Nokia Ventures Organization and the Discontinued Display Products were reported under “Other Operations,” as were Common Group Functions.

The following table sets forth the regional distribution of our net sales for the years indicated.

Percentage of Net Sales by Region

	Year ended December 31,		
	2001	2000	1999
Europe	49%	52%	53%
Americas	25%	25%	25%
Asia-Pacific	26%	23%	22%
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>

During the past three years, we have made substantial capital expenditures in manufacturing capacity, and research and development. In 2001, capital expenditures totaled EUR 1,041 million, a decrease of 34% compared to 2000 (EUR 1,580 million), and increased 21% in 2000 compared to 1999 (EUR 1,302 million). As a result of aligning our manufacturing capacity to match the lower market demand for mobile phones and network infrastructure, capital expenditures decreased in 2001 compared to 2000. Principal investments during the three years included office and manufacturing facilities, production lines, test equipment and computer hardware used primarily in research and development. Research and development costs, which consist primarily of costs related to developing telecommunications software and hardware, and mobile handsets and related software, totaled EUR 2,985 million in 2001, an increase of 16% from 2000 (EUR 2,584 million) and increased 47% in 2000 compared to 1999 (EUR 1,755 million). Research and development costs represented 9.6% of net sales in 2001, compared to 8.5% of net sales in 2000 and 8.9% of net sales in 1999. For further information regarding our research and development activities see “Item 4.B Business Overview—Research and Development.”

In 2001, we decreased our personnel by a total of 6,440 as a result of outsourcing and restructuring of some businesses. In 2000, we increased our personnel by 5,029. The majority of these new employees were in research and development and in sales and marketing activities. At the end of 2001, we employed 53,849 people world-wide, compared to 60,289 and 55,260 at December 31, 2000 and 1999, respectively.

2001 compared to 2000

Nokia Net Sales and Operating Profit

The year 2001 was characterized by a competitive operating environment and compounded by a weakened global economy. Our net sales totaled EUR 31,191 million in 2001 and EUR 30,376 million in 2000, representing an increase in net sales of 3% in 2001. Our gross margin in 2001 was at approximately the same level as in 2000 (36.6% and 37.2%, respectively). Our operating profit decreased to EUR 3,362 million in 2001, compared to EUR 5,776 million in 2000. Our operating margin was 10.8% in 2001, compared to 19.0% in 2000. We continued to invest significantly in research and development. Research and development expenses totaled EUR 2,985 million in 2001, an increase of 16% from 2000 (EUR 2,584 million). Research and development expenses represented 9.6% of net sales in 2001 compared to 8.5% of net sales in 2000.

During 2001, operating profit was negatively impacted by non-recurring items totaling EUR 1,573 million, which consisted of goodwill impairment of EUR 518 million, restructuring charges of EUR 261 million, increases in write-offs for Telsim and Dolphin receivables of EUR 714 million and impairment of minority investments of EUR 80 million. The goodwill impairment of EUR 518 million relates to Nokia Networks’ Broadband Systems business and Nokia

Internet Communications within Nokia Ventures Organization. We periodically review the carrying value of our assets and identified an impairment due to the impact of overall adverse economic conditions and the deterioration of the markets in which these businesses operate. The impairment was calculated by comparing the discounted cash flows of the relevant business to the carrying value of goodwill for that business. The impairments were recorded in connection with the restructuring of these businesses.

The EUR 261 million charged to income in 2001 for restructuring expenses in Nokia Networks' Broadband Systems business and Nokia Internet Communications within Nokia Venture Organization related primarily to inventory write-offs, redundancy and personnel costs and operating lease costs for surplus space, and to a lesser extent to capacity alignment in Nokia Mobile Phones. Virtually all of these costs were incurred in 2001.

The increases in write-offs for Telsim and Dolphin receivables are discussed below under "Segment Results—Nokia Networks."

Segment Results

Nokia Networks—Net sales of Nokia Networks were EUR 7,534 million in 2001 compared to EUR 7,714 million in 2000. The first quarter of 2001 remained very strong in our network business. However, reduced investments by operators started to have a significant effect on sales growth in the second half of the year when sales fell sharply resulting in an overall sales decline of 2% compared with 2000.

However, throughout 2001, operators continued to invest in capacity, most notably in the United States and Asia where GSM is advancing steadily and thus strengthening its position as the dominant global 2G standard. In Europe, operators accelerated their preparations for the onset of next generation multimedia products and services.

During 2001, in response to adverse developments in the market and customer environment, we realigned parts of our organizational structure in a move to increase overall efficiencies. This included decisions in both manufacturing and R&D to focus resources on high value-added parts of the business while outsourcing others. This is in line with our ongoing strategy of focusing and building on core skills while teaming up with select global partners. Nokia Networks' research and development costs were EUR 1,135 million in 2001 (15.0% of Nokia Networks' net sales) and EUR 1,013 million in 2000 (13.1% of Nokia Networks' net sales).

Nokia Networks' operating profit decreased to an operating loss of EUR 73 million in 2001 compared to an operating profit of EUR 1,358 million in 2000. Nokia Networks' operating margin was -1.0% in 2001 and 17.6% in 2000. The decline in the operating margin was a result of intensified pricing pressure due to increased competition in GSM markets. During 2001, Nokia Networks' operating margin was negatively impacted by non-recurring items totaling EUR 1,041 million. Nokia made a one-time charge of EUR 714 million to write-off Nokia Networks' customer loans of EUR 669 million related to a defaulted financing to Telsim, a GSM operator in Turkey, and EUR 45 million relating to the insolvency of Dolphin in the United Kingdom. With these additional amounts we have now written-off our total exposure to Telsim and Dolphin. For further information regarding the Telsim litigation see "Item 8.A.7 Litigation." Operating results in 2001 were also negatively impacted by a goodwill impairment of EUR 211 million and restructuring charges of EUR 116 million in Nokia Networks' Broadband Systems business. These resulted from a significant downturn in the market of the challenger broadband operators in the United States, which were the main customer group for Nokia Networks' Broadband Systems business. The business group's order inflow was EUR 8,204 million in 2001 and EUR 8,799 million in 2000, representing a year-on-year decrease of 7% in 2001.

Nokia Mobile Phones—Net sales of Nokia Mobile Phones were EUR 23,158 million in 2001 compared to EUR 21,887 million in 2000. However in 2001, strong sales growth in the first half was partially offset in the second half by weaker sales primarily in Europe and Asia-Pacific, resulting in an increase in net sales of 6% compared with 2000.

Nokia sold 140 million mobile phones in 2001, representing about 9% year-on-year growth. Contrary to the overall market, which experienced negative growth, our sales volumes continued to grow in all geographical regions, with growth strongest in Asia-Pacific.

This resulted in a significant rise in our global market share from around 32% in 2000 to an estimated share of about 37% in 2001. The shipment of 14 new models from a total of 22 new mobile phone introductions during the year boosted market share growth. In 2001, we increased our market share for the fourth consecutive year, almost doubling it from the level of 19% in 1997.

According to our preliminary estimates, global mobile phone market sales volumes in 2001 declined about 5% to approximately 380 million units. Replacement purchases are estimated to have accounted for about 45% of the total industry sales volumes. In 2001, the global subscriber base is estimated to have grown by 30% to about 930 million mobile phone users.

Market sales volumes continued to rise in Asia-Pacific in 2001 with 15% market growth. Demand in the Americas is estimated to have remained at approximately the level of the previous year; in Europe, market sales volumes declined to an estimated 23% during 2001. Nokia Mobile Phones' research and development costs totaled EUR 1,599 million (6.9% of Nokia Mobile Phones' net sales) in 2001 compared to EUR 1,306 million (6.0% of Nokia Mobile Phone's net sales) in 2000.

Nokia Mobile Phones' operating profit decreased to EUR 4,521 million in 2001 compared to EUR 4,879 million in 2000. Nokia Mobile Phones' operating margin was 19.5% in 2001 and 22.3% in 2000. The decrease in the Nokia Mobile Phones' operating margin in 2001 resulted from slow sales growth due to intense market competition.

Nokia Ventures Organization—Commencing January 1, 2000, Nokia Ventures Organization has been segregated into a separate segment as a result of its increased activity. Prior to 2000, this business reported under Other Operations, which included Display Products, as well as the activities described below as common group functions. Net sales from Nokia Ventures Organization totaled EUR 585 million in 2001 compared to EUR 854 million in 2000.

Nokia Ventures Organization reported operating losses of EUR 855 million in 2001 compared to EUR 387 million in 2000. During 2001, operating results were negatively impacted by non-recurring items totaling EUR 423 million which consisted of a goodwill impairment of EUR 307 million related primarily to the acquisitions of Network Alchemy and Ramp Networks, restructuring charges of EUR 110 million mainly relating to Nokia Internet Communications, and an impairment of minority investments of EUR 6 million. IT investments in the corporate market continued at a very low level and resulted in a declining corporate network security market.

Common Group Expenses—This line item, which comprises Nokia Head Office, Nokia Research Center and other general functions' operating losses, totaled EUR 231 million in 2001, compared to EUR 74 million in 2000. During 2001, the company's investment in certain equity securities suffered a permanent decline in value resulting in an impairment of minority investments of EUR 74 million.

Net Financial Income

Net interest and other financial income totaled EUR 125 million in 2001 compared to EUR 102 million in 2000. The generation of net financial income in 2001 resulted from a positive

net operating cash flow of EUR 6,547 million and a net debt to equity ratio of minus 41%, at December 31, 2001, as well as reduced hedging expenses. See “—Exchange Rates.” At year-end 2001, we had cash and cash equivalents of EUR 6,125 million.

Profit Before Taxes

Profit before taxes and minority interests totaled EUR 3,475 million in 2001 compared to EUR 5,862 million in 2000. Taxes amounted to EUR 1,192 million and EUR 1,784 million in 2001 and 2000, respectively.

Minority Interests

Minority shareholders' interest in our subsidiaries' profits totaled EUR 83 million in 2001 compared to EUR 140 million in 2000.

Net Profit and Earnings per Share

Net profit in 2001 decreased to EUR 2,200 million, compared to EUR 3,938 million in 2000, representing a year-on-year decrease in net profit of 44% in 2001. Basic earnings per share, adjusted to reflect the April 2000 four-for-one share split, decreased to EUR 0.47 in 2001 compared to EUR 0.84 in 2000.

2000 compared to 1999

Nokia Net Sales and Operating Profit

Our net sales totaled EUR 30,376 million in 2000 compared to EUR 19,772 million in 1999, representing an increase in net sales of 54% in 2000. Our operating profit increased to EUR 5,776 million in 2000 compared to EUR 3,908 million in 1999. Our operating margin was 19.0% in 2000 compared to 19.8% in 1999.

Segment Results

Nokia Networks—Net sales of Nokia Networks were EUR 7,714 million in 2000 compared to EUR 5,673 million in 1999. The 36% increase in net sales at Nokia Networks in 2000 was due primarily to continuing GSM expansion driven by growth in the GSM subscriber base and upgrades and the commencement of GPRS shipments.

Nokia Networks' research and development costs were EUR 1,013 million in 2000 (13.1% of Nokia Network's net sales) and EUR 777 million in 1999 (13.7% of Nokia Networks' net sales).

Nokia Networks' operating profit increased to EUR 1,358 million in 2000 compared to EUR 1,082 million in 1999. Nokia Networks' operating margin was 17.6% in 2000 and 19.1% in 1999, as a result of intensified pricing pressure due to increased competition in GSM markets.

The business group's order inflow was EUR 8,799 million in 2000 and EUR 6,481 million in 1999, representing year-on-year increase of 36% in 2000.

Nokia Mobile Phones—Net sales of Nokia Mobile Phones totaled EUR 21,887 million in 2000 compared to EUR 13,182 million in 1999. The 66% increase in 2000 were achieved as Nokia gained market share and introduced a variety of new products and innovative features targeted at different consumer segments.

Nokia Mobile Phones' research and development costs totaled EUR 1,306 million, or 6.0% of net sales, in 2000 compared to EUR 835 million, or 6.3% of net sales, in 1999.

Nokia Mobile Phones' operating profit increased to EUR 4,879 million in 2000, compared to EUR 3,099 million in 1999. Nokia Mobile Phones' operating margin was 22.3% in 2000 and 23.5% in 1999. The decrease in the Nokia Mobile Phones' operating margin in 2000 was due primarily to our decision to aggressively grow our market share in more competitive market environment, as well as weaker economic conditions in a number of regions, principally the United States.

Nokia Venture Organization—Net sales from Nokia Ventures Organization totaled EUR 854 million in 2000 compared to EUR 415 million in 1999.

Nokia Ventures Organization reported an operating loss of EUR 387 million in 2000, compared to an operating loss of EUR 175 million in 1999. The operating losses were due primarily to our continued substantial investment in this segment.

Common Group Expenses—This line item, which comprises Nokia Head Office, Nokia Research Center and other general functions operating losses, totaled EUR 74 million in 2000, compared to EUR 98 million in 1999. In 2000, the operating result includes a pension credit of EUR 55 million from the change in accounting method relating to Finnish pension plans.

Net Financial Income

Net interest and other financial income totaled EUR 102 million in 2000, compared to net financial expenses of EUR 58 million in 1999. The generation of net financial income in 2000 resulted from a positive net operating cash flow of EUR 3,509 million and a net debt to equity ratio of minus 26%. At year-end 2000, we had cash and cash equivalents of EUR 4,183 million.

Profit before Taxes

Profit before taxes and minority interests totaled EUR 5,862 million in 2000, compared to EUR 3,845 million in 1999. Taxes amounted to EUR 1,784 million and EUR 1,189 million in 2000 and 1999, respectively.

Minority Interests

Minority shareholders' interest in our subsidiaries' profits totaled EUR 140 million in 2000 and EUR 79 million in 1999.

Net Profit and Earnings per Share

Net profit in 2000 increased to EUR 3,938 million, compared to EUR 2,577 million in 1999, representing a year-on-year increase in net profit of 53% in 2000. Basic earnings per share, adjusted to reflect the April 2000 four-for-one share split and two-for-one share split in 1999, increased to EUR 0.84 in 2000, compared to EUR 0.56 in 1999.

Exchange Rates

Nokia's business and results of operations are from time to time affected by changes in exchange rates, particularly between the euro, which replaced the Finnish markka as our reporting currency in 1999, and other currencies such as the US dollar, the Japanese yen and the UK pound sterling. See "Item 3.A—Selected Financial Data—Exchange Rate Data." Foreign currency denominated assets and liabilities, together with highly probable purchase and sale commitments, give rise to foreign exchange exposure. The introduction of the euro has decreased our transaction exposure. In general, appreciation of the euro relative to another currency has an adverse effect on Nokia's net sales and operating profit, while depreciation of the euro has a positive effect, with the exception of Japanese yen, being the only significant non-euro purchasing currency.

During 2001, the euro depreciated approximately 5.6% against the US dollar and approximately 3.0% against the UK pound sterling. During 2000, the euro depreciated approximately 6.3% against the US dollar and appreciated approximately 1.2% against the UK pound sterling. In 1999, the euro depreciated approximately 15.2% against the US dollar and approximately 11.8% against the UK pound sterling. The impact of the depreciation of the euro on Nokia's results of operations was slightly positive in 2001, 2000 and 1999.

In 2001 and 2000, the euro appreciated approximately 8.7% and 4.3%, respectively, against the Japanese yen, which had a slightly positive impact on our result of operations, due to the fact that Nokia had net purchases in Japanese yen. In 1999, the euro depreciated approximately 24.6% against the Japanese yen, having a slightly negative effect on our result of operations.

In addition to the impact of exchange rate fluctuations on our operating results discussed above, Nokia's balance sheet is also affected by the translation into euro for financial reporting purposes of the shareholders' equity of our foreign subsidiaries that are denominated in currencies other than the euro. In general, this translation increases our shareholders' equity when the euro depreciates, and affects shareholders' equity adversely when the euro appreciates against the relevant other currencies.

For a discussion on the instruments used by Nokia in connection with our hedging activities, see note 34 to our consolidated financial statements included in Item 18 of this Form 20-F. See also "Item 11. Quantitative and Qualitative Disclosure About Market Risk" and "Item 3.D Risk Factors—Our net sales and costs are affected by fluctuations in the rate of exchange particularly between the euro, which is our reporting currency, and the US dollar and the Japanese yen as well as certain other currencies."

Economic and Monetary Union and the Euro

In January 1999, 11 European Union member states—Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain—formed the EMU. The 11 EMU member states also introduced a new common currency: the euro. The fixed, irrevocable conversion rates between the euro and national EMU currencies were announced on December 31, 1998. These countries, as well as Greece, have adopted the euro as their national currency as of January 1, 2002.

Nokia implemented use of the euro in its internal operations from the beginning of January 1, 1999. We have also used the euro to report our results for periods beginning on or after the same date.

The comparative financial information in the selected financial data through December 31, 1998 has been converted into euro using the fixed conversion rate for Finnish markka to euro announced on December 31, 1998. Accordingly, the selected financial data depicts the same trends that would have been presented had they been presented in Finnish markka. However, because they were originally prepared using Finnish markka, they are not necessarily comparable to financial statements of other companies that originally prepared financial statements in a currency other than the Finnish markka and converted those currencies to euro.

Principal Differences Between IAS and US GAAP

Nokia's consolidated financial statements are prepared in accordance with IAS.

Our net profit in 2001 under IAS was EUR 2,200 million, compared to EUR 3,938 million in 2000 and EUR 2,577 million in 1999. Under US GAAP, Nokia would have reported net income of EUR 1,903 million in 2001, compared to EUR 3,847 million in 2000 and EUR 2,542 million in 1999.

The principal differences between IAS and US GAAP that affect our net profit or loss, as well as our shareholders' equity, relate to the treatment of development costs, marketable securities, pension costs, provision for social security costs on stock options, stock compensation expense, amortization of goodwill and certain cash flow hedges. See note 37 to our consolidated financial statements included in Item 18 of this Form 20-F for a description of the principal differences between IAS and US GAAP and for a description of the anticipated impact on the consolidated financial statements of the adoption of recently issued US GAAP accounting standards.

5.B Liquidity and Capital Resources

At December 31, 2001, Nokia's cash and cash equivalents increased considerably to EUR 6,125 million, compared to EUR 4,183 million at December 31, 2000, primarily as a result of increased cash generated from operations and continued successful working capital management. We hold our cash and cash equivalents predominantly in euros. Cash and cash equivalents totaled EUR 4,159 million at December 31, 1999. Net cash from operating activities was EUR 6,547 million in 2001, compared to EUR 3,509 million in 2000 and EUR 3,102 million in 1999.

Net cash used in investing activities in 2001 was EUR 2,679 million, compared to EUR 2,531 million in 2000 and EUR 1,359 million in 1999. Cash flow from investing activities in 2001 included EUR 379 million in proceeds from the sale of fixed assets and other investments, compared to EUR 300 million in 2000 and EUR 466 million in 1999. Capital expenditures for 2001 were EUR 1,041 million, compared to EUR 1,580 million in 2000 and EUR 1,302 million in 1999. Major items of capital expenditure included office and manufacturing facilities, production lines, test equipment and computer hardware used primarily in research and development. Long-term loans made to customers were EUR 1,129 million compared to EUR 776 million in 2000.

Net cash used in financing activities increased to EUR 1,895 million in 2001, compared to EUR 1,034 million in 2000, primarily as a result of increases in dividends paid and repayment of short-term borrowings. Net cash used in financing activities increased to EUR 1,034 million in 2000 compared to EUR 574 million in 1999, primarily as a result of increases in dividends paid and long-term receivables.

At December 31, 2001, Nokia had EUR 207 million in long-term interest-bearing liabilities and EUR 831 million in short-term borrowings, offset by EUR 6,125 million in cash and bank deposits and current available-for-sale investments, resulting in a net cash balance of EUR 5,087 million. For further information regarding our long-term liabilities, including interest rate structure and currency mix, see note 23 to our consolidated financial statements included in Item 18 of this Form 20-F. Our ratio of net interest-bearing debt, defined as short-term and long-term debt less cash and cash equivalents, to equity, defined as shareholders' equity and minority interests, was -41%, -26% and -41% at December 31, 2001, 2000 and 1999, respectively. The change in 2001 resulted from the improvement in our cash position, while the change in 2000 resulted primarily from a decrease in our short-term borrowings and a significant increase in our retained earnings.

The total dividends per share were EUR 0.27, EUR 0.28 and EUR 0.20 for the years ended December 31, 2001, 2000 and 1999, respectively, as adjusted to reflect the four-for-one share split effected in April 2000 and the two-for-one share split effected in 1999. See "Item 3.A Selected Financial Data—Dividends."

Nokia has no potentially significant refinancing requirements in 2002. Nokia expects to incur additional indebtedness from time to time as required to finance working capital needs. At December 31, 2001, Nokia had a USD 500 million US commercial paper program and a USD 500 million euro commercial paper program. In addition at the same date, Nokia had a Finnish local commercial paper program totaling EUR 750 million. At December 31, 2001, we also had committed credit facilities totaling USD 2,600 million and a number of short-term

uncommitted facilities. For further information regarding our short-term borrowings, including the average interest rate, see note 25 to our consolidated financial statements included in Item 18 of this Form 20-F.

Nokia has historically maintained a high level of liquid assets. Management estimates that the cash and cash equivalents level of EUR 6,125 million at the end of 2001, together with Nokia's available credit facilities, cash flow from operations, funds available from long-term and short-term debt financings, as well as the proceeds of future equity or convertible bond offerings, will be sufficient to satisfy our future working capital needs, capital expenditure, research and development and debt service requirements at least through 2002. The ratings of our short and long-term debt from credit rating agencies at December 31, 2001, were:

Short-term	Standard & Poor's	A-1
	Moody's	P-1
Long-term	Standard & Poor's	A
	Moody's	A1

We believe that Nokia will continue to be able to access the capital markets on terms and in amounts that will be satisfactory to us, and that we will be able to obtain bid and performance bonds, to arrange or provide customer financing as necessary to support our business and to engage in hedging transactions on commercially acceptable terms.

We expect the amount of our capital expenditures during 2002 to be slightly lower than 2001 and to be funded from our cash flow from operations. At December 31, 2001, our committed capital expenditures amounted to EUR 1,041 million in respect of office and manufacturing facilities, production lines, test equipment and computer hardware used primarily in research and development.

Suppliers of telecommunications systems and products, especially those involving 3G and other new technologies sometimes are asked to offer customer financing as part of their bid package. We expect operators to continue to look for customer financing, and we expect this type of financing to continue to be an important means in competing in the communications networks market. See "Item 3.D Risk Factors—Customer financing to network operators is a competitive requirement and can affect our net sales, profits, balance sheet and cash flow adversely" and "Item 4.B Business Overview—Nokia Networks."

We have extended a significant amount of customer financing to selected customers. The following table sets forth Nokia's total committed and outstanding customer financing commitments for the years indicated.

Customer Financing

	At December 31,		
	2001	2000	1999
	EURm		
Financing commitments	2,955	305	334
Outstanding loans	1,128	907	370
Outstanding financial guarantees	127	319	230
Total	<u>4,210⁽¹⁾</u>	<u>1,531</u>	<u>934</u>

⁽¹⁾ Of the total committed and outstanding financing at December 31, 2001, EUR 3,607 million (86%) was in respect of 3G networks, compared to nil in both 2000 and 1999.

See “Item 4.B Business Overview—Nokia Networks” and note 34b to our consolidated financial statements included in Item 18 of this Form 20-F for additional information relating to our committed and outstanding customer financing.

In 2001 we wrote off a total of EUR 714 million in customer loans relating to a defaulted financing to Telsim (EUR 669 million), a GSM operator in Turkey, and to the insolvency of Dolphin in the United Kingdom (EUR 45 million).

In 2001, our total committed customer financing exposure increased significantly compared to previous years. Our intent is to mitigate this exposure, market conditions permitting. We are seeking to make arrangements with financial institutions and investors to transfer part of the credit risk we have incurred from the commitments and outstanding loans we have made as well as from the financial guarantees we have given.

The current assessment of our customer market indicates that we do not expect our total committed customer financing to increase significantly. We expect the overall amount of our committed customer financing to increase by a small amount during 2002 as compared to the December 31, 2001 level. As a strategic market requirement, we plan to continue to extend customer financing to a small number of selected customers. However, should customer requirements, market or economic conditions change significantly, we may be required to increase materially the total amount of our committed customer financing. Outstanding customer financing is expected to increase in 2002 as customers draw on available financing.

We expect that the necessary funding for our customer financing commitments to be financed mainly through cash flow from operations as well as through the capital markets.

The following table sets forth our principal contractual obligations for the periods indicated.

Contractual Obligations Payments Due by Period

	<u>2002</u>	<u>2003- 2004</u>	<u>2005- 2006</u>	<u>Thereafter</u>	<u>Total</u>
			EURm		
Long-term debt	—	192	—	91	283
Operating leases	254	391	327	274	1,246

Please see notes 29 and 30 to our consolidated financial statements for further information regarding commitments and contingencies and leasing contracts, respectively.

The following table sets forth the amounts of Nokia’s undrawn customer financing commitments and the periods during which these commitments are available to customers. To the extent that these commitments are not drawn by customers during these periods the commitments will expire.

Customer Financing Commitments Expiration Per Period

	<u>2002</u>	<u>2003-2005</u>	<u>2006</u>	<u>Total</u>
		EURm		
Financing commitments ⁽¹⁾	10	2,945	0	2,955

⁽¹⁾ Includes loans and financial guarantees.

The following table sets forth the amounts of Nokia's contingent commitments for the periods indicated.

Contingent Commitments Expiration Per Period

	<u>2002</u>	<u>2003- 2004</u>	<u>2005- 2006</u>	<u>Thereafter</u>	<u>Total⁽²⁾</u>
			EURm		
Guarantees of Nokia's performance of certain network supply contracts ⁽¹⁾ . . .	396	67	10	32	505

⁽¹⁾ Includes performance bonds, standby letters of credit and other similar instruments.

⁽²⁾ In addition to these amounts, a total of EUR 127 million of financial guarantees related to its customer financing activities are outstanding. The majority of these are expected to expire at the latest by 2004.

5.C Research and Development, Patents and Licenses

Success in the telecommunications industry requires continuous introduction of new products and applications based on the latest available technology. This places considerable demands on our research and development activities. Consequently, in order to maintain our competitiveness, we have made substantial research and development expenditures in each of the last three years. Our consolidated research and development costs for 2001 were EUR 2,985 million, an increase of 16% over 2000 (EUR 2,584 million) and increased 47% compared to 1999 (EUR 1,755 million). These costs represented 9.6%, 8.5% and 8.9% of net sales in 2001, 2000 and 1999, respectively. To enable our future growth, we continued to invest in our worldwide research and development network, as well as increasing our collaboration with third parties. At December 31, 2001, we had research and development centers in 14 countries and 18,600 research and development employees, approximately 35% of Nokia's total personnel. Research and development expenses of Nokia Networks as a percentage of its net sales were 15.1% in 2001, 13.1% in 2000 and 13.7% in 1999. In the case of Nokia Mobile Phones, research and development costs represented 6.9%, 6.0% and 6.3% of its net sales in 2001, 2000 and 1999, respectively. See "Item 4.B Business Overview—Research and Development" and "—Patents and Licenses."

5.D Trend Information

General

Our business and results of operations have been affected during the last several years by a number of important trends. The global communications market has experienced rapid growth, especially as the areas of voice and data transmission have converged and become digitized. The mobile communications market in particular has grown in line with the demand for, and use of, mobile telephones. However, in 2001, the mobile phone market showed an unprecedented growth slowdown. The year 2001 was a technology transition year for our industry, characterized by increasingly complex environment, and compounded by a weakened global economy. All these factors led to lower capital expenditure among operators and lower annual sales volumes.

We now see that key enablers for new products and services are in place but at different stages of maturity and market penetration. We see multimedia messaging as the main driver in the current technology shift, with the majority of mobile devices in our product plan for 2003 being MMS-enabled.

The year 2002 will also mark the start of 3G, another key component of industry renewal. The transition from 2G to 3G is likely to span several years. However, volume sales of these new mobile devices will depend on the timely and successful build-out of 3G networks and the availability of related services offered by third parties.

As the mobile multimedia products and services market prepares to take off, the industry remains in transition. The speed of this transition has been slower than previously anticipated.

Nokia Mobile Phones

Total mobile phone market sales volumes decreased by approximately 5% between 2000 and 2001. Nokia's preliminary market research indicates that approximately 380 million mobile phones were sold globally in 2001. Nokia's own mobile phone sales volumes in 2001 grew by approximately 9% to 140 million units. This resulted in a significant rise in the company's global market share from around 32% in 2000 to an estimated share of about 37% in 2001, bringing the company closer to its targeted long-term 40% market share. Nokia believes that general weakness in all key regions will affect mobile phone demand for the remainder of 2002. In 2002, the company sees total market sales volumes rising to 400-420 million units, reflecting modest growth on 2001. This estimate is partly based on the assumption that the global replacement cycle trend, discussed below, will not change significantly from the current level of over two years, one way or another. However, given the continuous rapid technological advancements and the lifestyle and fashion related nature of the mobile phone industry, we assume that people will want to upgrade their mobile devices on a regular basis. As a consequence, the industry dynamics of declining average selling prices could change: expanding terminal functionality is one factor that could increase average selling prices in the future, especially within the high-end categories.

As overall mobile phone market penetration increases, upgrade or replacement sales are representing a larger portion of total mobile phone sales than in the past. We expect that upgrade or replacement sales will reach approximately 50% to 55% of market volumes in 2002, compared with an estimated 45% in 2001. Within the next few years, we estimate the share of replacement sales will rise to represent between 70% and 80%. We intend to capitalize on this trend by offering new models for upgrade customers featuring higher functionality. We find that our corporate customers are often the first to purchase these higher functionality models in volumes. Capitalizing on our strong brand, we intend to introduce new, higher-functionality products to stimulate upgrade purchases and to offset, at least in part, the general trend in the market toward lower average mobile phone prices. In the first half of 2002, we plan to ship about 20 new models incorporating a broad range of enabling technologies.

Nokia Networks

During 2001, the overall infrastructure market decelerated and was slightly down from the previous year and the GSM market remained flat. Nokia expects an annual decline in the GSM and overall infrastructure market in 2002. Despite robust GSM/EDGE growth in the United States, Nokia Networks expects to continue to experience challenging conditions in its largest market, Europe, and in China for the rest of 2002. Nevertheless, we believe we are still on track to achieving our 35% targeted share of the overall mobile infrastructure market in the long-term.

Nokia's market forecasts indicate that GSM, including GPRS, will continue to constitute well over 50% of the total market sales volumes through 2003.

Nokia Ventures Organization

The business models, technologies and products being developed within Nokia Ventures Organization are designed to extend and sustain our product and long-term business development.

The precise impact of the Nokia Ventures Organization businesses on our consolidated results cannot be predicted due to the early stages of many of these initiatives and uncertainties relating to new business development. The revenue growth rates, operating margins and cash flow characteristics of these businesses may be materially different from those of our networks and mobile phone businesses. Nokia expects growth in its target markets for Internet Security and VPN offering to resume as corporations move to invest in protecting information on their corporate networks.

Customer Financing

In 2001, our total committed customer financing exposure increased significantly compared to previous years. This reflected our previous low level of customer financing and the recent trend of network operators sometimes requiring their suppliers to arrange or provide long-term financing in relation to infrastructure projects. We expect network operators to continue to require this type of finance. See “Item 4.B—Business Overview—Nokia Networks.” We expect the overall amount of our committed customer financing to increase by a small amount during 2002 as compared to the December 31, 2001 level. However, we do not expect that this exposure will have a material impact on our liquidity. See “Item 5.B—Liquidity and Capital Resources.” However, we cannot guarantee that we will be successful in providing this type of financing to customers, in analyzing and mitigating exposure to their underlying credit risks and in otherwise managing the challenges raised by our significantly increased customer financing. See “Item 3.B—Risk Factors—Customer financing to network operators is a competitive requirement and can affect our net sales, profits, balance sheet and cash flow adversely.”

For more information about other factors that may affect our results of operations, see “Item 3.D Risk Factors.”

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

6.A Directors and Senior Management

Pursuant to the provisions of the Finnish Companies Act and our articles of association, the control and management of Nokia is divided among the shareholders in a general meeting, the Board of Directors and the Group Executive Board.

The current members of the Board of Directors were elected at the Annual General Meeting on March 21, 2002, in accordance with the proposal of the Nomination Committee. On the same date, the Chairman and Vice Chairman were elected by the board members. Certain information with respect to these individuals is set forth below.

Board of directors

Chairman Jorma Ollila, b. 1950

*Chairman and CEO
and Chairman of the Group Executive Board of Nokia
Corporation.
Board member since 1995. Chairman since 1999.*

President and CEO, and Chairman of the Group Executive Board of Nokia Corporation 1992-1999, President of Nokia Mobile Phones 1990-1992, Senior Vice President, Finance of Nokia 1986-1989.

Member of the Board of Directors of Ford Motor Company, Otava Books and Magazines Group Ltd and UPM-Kymmene Corporation.

Member of The European Round Table of Industrialists.

Vice Chairman Paul J. Collins, b. 1936

Board member since 1998. Vice Chairman since 2000.

Vice Chairman of Citigroup Inc. 1998-2000, Vice Chairman and member of the Board of Directors of Citicorp and Citibank N.A. 1988-2000.

Member of the Board of Directors of BG Group, Genuity Corporation and Kimberly-Clark Corporation.

Georg Ehrnrooth, b. 1940

Board member since 2000.

President and CEO of Metra Corporation 1991-2000, President and CEO of Lohja Corporation 1979-1991.

Chairman of the Board of Directors of Assa Abloy AB (publ) and Varma-Sampo Mutual Pension Insurance Company, Vice Chairman of the Board of Directors of Rautaruukki Corporation, member of the Board of Directors of Oy Karl Fazer Ab, Sandvik AB (publ), Sampo plc and Wärtsilä Corporation.

Chairman of The Center for Finnish Business and Policy Studies (EVA).

Dr Bengt Holmström, b. 1949

*Paul A. Samuelson Professor of Economics at MIT, joint
appointment at the MIT Sloan School of Management.
Board member since 1999.*

Edwin J. Beinecke Professor of Management Studies at Yale University 1985-1994.

	Member of the Board of Directors of Kuusakoski Oy. Member of the American Academy of Arts and Sciences and Foreign member of The Royal Swedish Academy of Sciences.
Per Karlsson, b. 1955	<i>Corporate Advisor.</i> <i>Board member since 2002.</i> Executive Director, Enskilda M&A, Enskilda Securities (London) 1986-1992. The Boston Consulting Group (London) 1979-1986.
Robert F. W. van Oordt, b. 1936	<i>Chairman of Rodamco Europe N.V.</i> <i>Board member since 1998.</i> CEO of Rodamco Europe N.V. 2000-2001, Chairman of the Executive Board of NV Koninklijke KNT BT 1993-1996, Chairman of the Executive Board of Bühmann-Tetterode N.V. 1990-1993, Executive Vice President and COO, and member of the Board of Directors of Hunter Douglas Group N.V. 1979-1989. Member of the Supervisory Board of Draka Holding N.V., member of the Board of Directors of Fortis Bank N.V., Schering-Plough Corporation and N.V. Umicore S.A.
Dame Marjorie Scardino, b. 1947	<i>Chief Executive and member of the Board of Directors of Pearson plc.</i> <i>Board member since 2001.</i> Chief Executive of The Economist Group 1993-1997, President of the North American Operations of The Economist Group 1985-1993.
Vesa Vainio, b. 1942	<i>Board member since 1993.</i> Chairman (1998-1999 and 2000-2002) and Vice Chairman (1999-2000) of the Board of Directors of Nordea AB (publ). Chairman of the Board of Management and CEO of Merita Bank Ltd and CEO of Merita Ltd 1992-1997. President of Kymmene Corporation 1991-1992. Chairman of the Board of Directors of UPM-Kymmene Corporation and Vice Chairman of the Board of Directors of Wärtsilä Corporation. Chairman of the Board of The Central Chamber of Commerce of Finland.
Arne Wessberg, b. 1943	<i>Chairman of the Board of Directors and President of Yleisradio Oy (Finnish Broadcasting Company).</i> <i>Board member since 2001.</i> Member of the Board of Trustees of IIC 1996-1998 and 1993-1995. Chairman of the Board of Directors of Digita Oy. President of the European Broadcasting Union (EBU) and member of the Board of Directors of the International Council of NATAS and the Confederation of Finnish Industry and Employers.

Our articles of association provide for a Group Executive Board, which is responsible for managing the operations of Nokia. The Chairman and the members of the Group Executive Board are elected by the Board of Directors. Only the Chairman of the Group Executive Board can be a member of both the Board of Directors and the Group Executive Board. The current members of our Group Executive Board are set forth below.

Group Executive Board

Chairman Jorma Ollila, b. 1950

*Chairman and CEO of Nokia Corporation.
Group Executive Board member since 1986.
Chairman since 1992.
Joined Nokia 1985.*

President and CEO, and Chairman of the Group Executive Board of Nokia Corporation 1992-1999, President of Nokia Mobile Phones 1990-1992, Senior Vice President, Finance of Nokia 1986-1989.

Member of the Board of Directors of Ford Motor Company, Otava Books and Magazines Group Ltd and UPM-Kymmene Corporation.

Member of The European Round Table of Industrialists.

Pekka Ala-Pietilä, b. 1957

*President of Nokia Corporation.
Group Executive Board member since 1992.
Joined Nokia 1984.*

Executive Vice President and Deputy to the CEO of Nokia Corporation and President of Nokia Communications Products 1998-1999, President of Nokia Mobile Phones 1992-1998, Vice President, Product Marketing of Nokia Mobile Phones 1991-1992, Vice President, Strategic Planning of Nokia Mobile Phones 1990-1991.

Member of the Board of Economic Information Bureau and Finnish-Japanese Chamber of Commerce.

Dr Matti Alahuhta, b. 1952

*President of Nokia Mobile Phones.
Group Executive Board member since 1993.
With Nokia 1975-1982, rejoined 1984.*

President of Nokia Telecommunications 1993-1998, Executive Vice President of Nokia Telecommunications 1992, Senior Vice President, Public Networks of Nokia Telecommunications 1990-1992.

Member of the Board of Directors of Finnair Oyj.

Chairman of the Board of The Federation of Finnish Metal, Engineering and Electrotechnical Industries as well as member of the Board and member of the Executive Committee of The International Institute for Management Development (IMD).

Sari Baldauf, b. 1955

*President of Nokia Networks.
Group Executive Board member since 1994.
Joined Nokia 1983.*

	Executive Vice President of Nokia APAC 1997-1998, President, Cellular Systems of Nokia Telecommunications 1988-1996, Vice President, Business Development of Nokia Telecommunications 1987-1988.
	Member of the Board of International Youth Foundation and member of The National Committee for the Information Society Issues.
Mikko Heikkonen, b. 1949	<i>Executive Vice President and General Manager, Customer Operations of Nokia Networks.</i> <i>Group Executive Board member since 1998.</i> <i>Joined Nokia 1975.</i>
	President, Network Systems of Nokia Telecommunications 1997-1999, President, Network and Access Systems of Nokia Telecommunications 1995-1996, Senior Vice President, Area Management of Nokia Telecommunications 1993-1995, Senior Vice President, Cellular Systems of Nokia Telecommunications 1988-1992.
Olli-Pekka Kallasvuo, b. 1953	<i>Executive Vice President, Chief Financial Officer of Nokia Corporation.</i> <i>Group Executive Board member since 1990.</i> <i>Joined Nokia 1980.</i>
	Executive Vice President of Nokia Americas and President of Nokia Inc. 1997-1998, Executive Vice President, CFO of Nokia 1992-1996, Senior Vice President, Finance of Nokia 1990-1991.
	Chairman of the Board of Directors of F-Secure Corporation, Nextrom Holding S.A., Nokian Tyres plc and Sampo plc.
Dr Yrjö Neuvo, b. 1943	<i>Executive Vice President, CTO of Nokia Mobile Phones.</i> <i>Group Executive Board member since 1993.</i> <i>Joined Nokia 1993.</i>
	Senior Vice President, Product Creation of Nokia Mobile Phones 1994-1999, Senior Vice President, Technology of Nokia 1993-1994, National Research Professor of The Academy of Finland 1984-1992, Professor of Tampere University of Technology 1976-1992, Visiting Professor of University of California, Santa Barbara 1981-1982.
	Vice Chairman of the Board of Directors of Vaisala Corporation.
	Member of Finnish Academy of Technical Sciences, The Finnish Academy of Science and Letters, and Academiae Europae, Foreign member of Royal Swedish Academy of Engineering Sciences, and Fellow of the Institute of Electrical and Electronics Engineers.
Veli Sundbäck, b. 1946	<i>Executive Vice President, Corporate Relations and Trade Policy of Nokia Corporation.</i> <i>Group Executive Board member since 1996.</i> <i>Joined Nokia 1996.</i>

Secretary of State at the Ministry for Foreign Affairs
1993-1995, Under-Secretary of State for External Economic
Relations at the Ministry for Foreign Affairs 1990-1993.

Chairman of the Board of Directors of Huhtamäki Oyj.

Vice Chairman of the Board of the International Chamber
of Commerce, Finnish Section, Chairman of the Trade
Policy Committee of The Confederation of Finnish
Industry and Employers and Chairman of the Board of
the Finland-China Trade Association.

Anssi Vanjoki, b. 1956

*Executive Vice President, Nokia Mobile Phones.
Group Executive Board member since 1998.
Joined Nokia 1991.*

Senior Vice President, Europe & Africa of Nokia Mobile
Phones 1994-1999, Vice President, Sales of Nokia Mobile
Phones 1991-1994, 3M Corporation 1980-1990.

Of Nokia's strategic countries, Matti Alahuhta is responsible for Nokia's operations in Japan, Sari Baldauf for China and Olli-Pekka Kallasvuori for the United States.

6.B Compensation

Compensation to the Members of the Board of Directors and the Group Executive Board

For the year ended December 31, 2001, the aggregate compensation of all directors and executive officers that are members of the board of directors or the Group Executive Board, which included 16 persons, was approximately EUR 6.7 million. Of this amount, approximately EUR 1.4 million was paid to the members of the Group Executive Board pursuant to bonus arrangements for the 2001 calendar year. Non-executive members of the board of directors do not receive bonuses. The bonuses to executive directors are paid based on Nokia's executive incentive scheme (described below), which is performance based.

Executive bonus awards are aligned with Nokia's financial planning cycles and awards are calculated based on short-term (six-month) results. Executive bonuses are determined using the following criteria: profitability, revenue growth, net working capital rotation, and the achievement of Nokia's strategic objectives and each individual's contribution towards that achievement. Executive bonus payments are made twice each year, in March and September, in connection with the six-month periods ending December 31 and June 30, respectively.

Targets are set for the CEO and each Group Executive Board member with a threshold performance level for each criterion. In addition to these criteria, the Personnel Committee may apply discretion when proposing or determining payments. Bonuses are paid as a percentage of annual base salary.

Of the aggregate compensation of EUR 6.7 million, Jorma Ollila received, as remuneration for his services as CEO in 2001, a fixed salary of EUR 1,184,000, as well as bonuses in the aggregate of EUR 636,240 for the calendar year 2001. The remuneration that Mr. Ollila receives as Chairman (as described below) is in addition to the remuneration he receives as CEO. Pekka Ala-Pietilä received, as remuneration for his services as President in 2001, a fixed salary of EUR 594,000, as well as bonuses in the aggregate of EUR 127,624 for the calendar year 2001.

The remuneration for members of our Board of Directors for each term expiring at the close of the next Annual General Meeting is resolved annually by our Annual General Meeting, after being proposed by the Nomination Committee of our Board.

The Annual General Meeting held on March 22, 2000 resolved that the annual retainers to board members should be EUR 109,000 for the Chairman, EUR 85,000 for the Vice Chairman and EUR 61,000 for each other member, retaining remuneration at the levels resolved in 1999, with approximately 60% of each retainer to be paid in cash, and the balance to be paid in shares of our stock, to be acquired from the market in compliance with the practice adopted in 1999. Pursuant to this resolution, the Chairman received 840 shares, the Vice Chairman 640 shares and each other member 460 shares.

The Annual General Meeting held on March 21, 2001 resolved that the annual retainers to board members should be EUR 130,000 for the Chairman, EUR 100,000 for the Vice Chairman and EUR 75,000 for each other member, with approximately 60% of each retainer to be paid in cash, and the balance to be paid in shares of our stock, to be acquired from the market in compliance with previous practice. Pursuant to this resolution, the Chairman received 1,530 shares, the Vice Chairman 1,178 shares and each other member 882 shares.

The Annual General Meeting held on March 21, 2002 resolved that the annual retainers to board members should be maintained at the levels resolved in 2001: EUR 130,000 for the Chairman, EUR 100,000 for the Vice Chairman, and EUR 75,000 for each other member, with approximately 60% of each retainer to be paid in cash, and the balance to be paid in shares of our stock, to be acquired from the market in compliance with previous practice. Pursuant to this resolution, as of April 30, 2002, the Chairman received 2,650 shares, the Vice Chairman 2,038 shares and each other member 1,529 shares.

6.C Board Practices

The Board of Directors

The Board decides on matters that, in relation to the Group's activities, are significant in nature. These types of matters include confirmation of the strategic guidelines, approval of the periodic plans and decisions on major investments and divestments. The Board appoints the CEO, the President, the Chairman and the members of the Group Executive Board of the Company. The Board also determines their remuneration.

The roles of the Board, its Chairman and its subcommittees are defined in the Board's Rules of Procedure.

Pursuant to the articles of association, Nokia Corporation has a Board of Directors composed of a minimum of seven and a maximum of ten members. The members of the Board are elected for a term of one year at each Annual General Meeting, which convenes each March or April. Between the Annual General Meeting held on March 21, 2001 and the Annual General Meeting held on March 21, 2002, the board was composed of eight members, and since the meeting held on March 21, 2002 it has consisted of nine members. The board elects a Chairman and a Vice Chairman from among its members for one term at a time. On March 21, 2002 the Board resolved that Jorma Ollila should continue to act as Chairman and that Paul J. Collins should continue to act as Vice Chairman.

Committees of the Board of Directors

The Personnel Committee monitors the personnel policy of the Group and oversees its implementation including the development of compensation policies applied in the Group. The Committee also prepares policy matters and principles for remuneration to be presented for the Board of Directors. As of March 21, 2001, the Personnel Committee was composed of the following members of the Board: Paul J. Collins (Chairman), Bengt Holmström, Marjorie Scardino and Vesa Vainio. The Committee convened three times in 2001. On March 21, 2002, the existing members were re-elected to the Personnel Committee for another year.

The Audit Committee consists of a minimum of three independent and qualified non-executive members of the Board. The purpose of the Committee is to assist the Board of Directors in fulfilling its responsibilities to oversee the Group's financial reporting processes including monitoring the integrity of the company's consolidated financial statements and the performance of its internal and external auditors. The Audit Committee also annually confirms the independence of the external auditors based on their written report. The Committee assembles regularly in each quarter. As of March 21, 2001, the Audit Committee was composed of the following members of the Board: Robert F.W. van Oordt (Chairman), Georg Ehrnrooth and Arne Wessberg. The Committee held four meetings during the year. On March 21, 2002, the existing members were re-elected to the Audit Committee for another year and Per Karlsson was elected as a new member.

The Nomination Committee prepares proposals for the general meeting concerning the composition, remuneration principles, and remuneration of the Board. It further monitors issues and practices related to corporate governance and proposes necessary actions in respect thereof. As of March 21, 2001, the Nomination Committee was composed of the following members of the Board: Paul J. Collins (Chairman), Bengt Holmström and Vesa Vainio. The Committee held one meeting in 2001. On March 21, 2002, the existing members were re-elected to the Nomination Committee for another year.

Service Contracts of the Chairman and CEO and of the President

We have a service contract with each of Jorma Ollila and Pekka Ala-Pietilä, each of an indefinite duration. The Board has also agreed with Mr. Ollila on the continuation of his services as CEO of Nokia for an additional five years through 2006.

Mr Ollila's contract has provisions for severance payments for up to 24 months of compensation (both base compensation and bonus) in the event of his termination of employment for reasons other than cause, including a change of control. Mr. Ollila will also be allowed to retain a portion of his unvested 1999C options proportionate to the length of his service, in the event his employment is terminated prior to the April 1, 2003 vesting date for the 1999C stock options. Mr. Ollila is further entitled to a full statutory pension from the date he turns 60 years of age, instead of the statutory age of 65.

Mr Ala-Pietila's contract has provisions for severance payments for up to 18 months of compensation (both base compensation and bonus) in the event of his termination of employment for reasons other than cause, including a change of control. Mr. Ala-Pietila will also be allowed to retain a portion of his unvested 1999C options proportionate to the length of his service, in the event his employment is terminated prior to the April 1, 2003 vesting date for the 1999C stock options. Mr. Ala-Pietila is entitled to a full statutory pension from the date he turns 60 years of age, instead of the statutory age of 65.

6.D Employees

At December 31, 2001, Nokia employed 53,849 people, compared with 60,289 at December 31, 2000 and 55,260 at December 31, 1999. The average number of personnel for 2001, 2000 and 1999 was

57,716, 58,708 and 51,177, respectively, divided according to their activity and geographical location as follows:

	2001	2000	1999
Nokia Networks	22,040	23,508	22,804
Nokia Mobile Phones	27,320	27,353	20,975
Nokia Ventures Organization	2,155	2,222	1,256
Common Group Functions	6,201	5,625	6,142
Nokia Group	57,716	58,708	51,177
Finland	23,653	24,495	23,155
Other European countries	14,045	14,365	12,997
Americas	11,215	11,491	8,818
Asia-Pacific	8,803	8,357	6,207
Nokia Group	57,716	58,708	51,177

Management believes that we have a good relationship with our employees and with the labor unions. Less than 50% of our employees are unionized.

6.E Share Ownership

Share Ownership

The following tables set forth the number of shares, ADSs and Swedish Depositary Receipts, or SDRs, beneficially held by members of the Board of Directors and the Group Executive Board as of April 30, 2002. The numbers provided in the tables below include not only shares acquired as compensation for services rendered as a member of the Board of Directors or the Group Executive Board, but also shares acquired by any other means.

Board of Directors

	Shares	ADSs (or SDRs, if indicated)
Jorma Ollila ⁽¹⁾	67,656	—
Paul J. Collins	—	85,344
Georg Ehrnrooth ⁽²⁾	302,871	—
Bengt Holmström	4,999	—
Per Karlsson ⁽²⁾	1,529	4,300 ⁽³⁾
Robert F.W. van Oordt	4,359	—
Marjorie Scardino	—	2,411
Vesa Vainio	15,659	—
Arne Wessberg	2,411	—
Total	399,484	92,055

⁽¹⁾ For Mr. Ollila's holdings of stock options and warrants, see the table under Stock Option Ownership below.

⁽²⁾ Mr. Ehrnrooth's and Mr. Karlsson's holdings include both shares held personally and shares held through a company.

⁽³⁾ Mr. Karlsson holds 4,300 SDRs, which together represent an ownership interest in 4,300 shares.

Group Executive Board

	Shares
Pekka Ala-Pietilä	9,600
Matti Alahuhta	49,200
Sari Baldauf	103,200
Mikko Heikkonen	19,000
Olli-Pekka Kallasvuo	10,000
Yrjö Neuvo	39,540
Veli Sundbäck	97,600
Anssi Vanjoki	106,000
Total	434,140

On April 30, 2002, the aggregate interest of the members of the Board of Directors and the Group Executive Board in our outstanding share capital was 925,679 shares, representing less than 1% of the issued share capital and voting rights in Nokia Corporation.

Stock Option Ownership

The following tables provide certain information relating to stock options and warrants held by members of the Group Executive Board as of April 30, 2002. These stock options and warrants were issued pursuant to the Nokia Stock Option Plans 1997, 1999 and 2001. For a description of our stock option plans, including information regarding the expiration date of the options under these plans, please see “—Nokia Stock Option Plans” and “—Other Employee Plans Related to Equity.”

Exercise price per share ⁽⁶⁾	Number of shares represented by exercisable options and warrants as of April 30, 2002			Number of shares represented by unexercisable options as of April 30, 2002		
	1997 C ⁽¹⁾ EUR 3.23	1999 A ⁽²⁾ EUR 16.89	1999 B ⁽²⁾ EUR 56.28	1999 C ⁽³⁾ EUR 29.12	2001 A and B ⁽⁴⁾ EUR 36.75	2001 C ⁽⁵⁾ EUR 26.67
Jorma Ollila	502,400	1,200,000	1,056,000	544,000	1,000,000	500,000
Pekka Ala-Pietilä	208,000	720,000	475,200	244,800	250,000	125,000
Matti Alahuhta	240,000	340,000	369,600	190,400	100,000	50,000
Sari Baldauf	240,000	420,000	369,600	190,400	100,000	50,000
Mikko Heikkonen	104,000	200,000	264,000	136,000	70,000	35,000
Olli-Pekka Kallasvuo	112,000	360,000	369,600	190,400	100,000	50,000
Yrjö Neuvo	200,000	280,000	264,000	136,000	70,000	35,000
Veli Sundbäck	400,000	400,000	264,000	136,000	40,000	20,000
Anssi Vanjoki	—	280,000	264,000	136,000	70,000	35,000

(1) Each 1997 C warrant originally granted entitles the holder to subscribe for 16 shares of Nokia stock.

(2) Each 1999 A and B option originally granted entitles the holder to subscribe for four shares of Nokia stock.

(3) Each 1999 C option originally granted entitles the holder to subscribe for four shares of Nokia stock. The 1999 C options will be fully exercisable on April 1, 2003.

(4) Each 2001 A and B option originally granted entitles the holder to subscribe for one share of Nokia stock. The 2001 A and B options will be 25% exercisable on July 1, 2002 and an additional 6.25% will be exercisable each calendar quarter thereafter, so that the options will be fully exercisable on July 1, 2005.

- (5) Each 2001 C option originally granted entitles the holder to subscribe for one share of Nokia stock. The 2001 C options will be 25% exercisable on January 1, 2003 and an additional 6.25% will be exercisable each calendar quarter thereafter, so that the options will be fully exercisable on January 1, 2006.
- (6) The exercise price per share for the 1997 C options has been adjusted for share splits that took place in 1998, 1999 and April 2000. The exercise price per share for the 1999 A, B and C options has been adjusted for the share split that took place in April 2000.

On April 30, 2002, the aggregate holdings of exercisable stock options and warrants of members of the Group Executive Board called for 9.9 million shares, representing less than 1% of the issued share capital and voting rights in Nokia Corporation.

	Number of shares represented by outstanding warrants/options as of April 30, 2002		Value of "In the Money" shares represented by outstanding warrants/options as of April 30, 2002 ⁽¹⁾	
	Exercisable	Unexercisable	Exercisable	Unexercisable
	EUR thousands			
Jorma Ollila	2,758,400	2,044,000	8,689	0
Pekka Ala-Pietilä	1,403,200	619,800	3,836	0
Matti Alahuhta	949,600	340,400	3,901	0
Sari Baldauf	1,029,600	340,400	3,987	0
Mikko Heikkonen	568,000	241,000	1,747	0
Olli-Pekka Kallasvuo	841,600	340,400	2,036	0
Yrjö Neuvo	744,000	241,000	3,248	0
Veli Sundbäck	1,064,000	196,000	6,324	0
Anssi Vanjoki	544,000	241,000	300	0

- (1) The potential realizable value of the stock options is based on the difference between the exercise price of the warrants/options (post split) and the closing market price of Nokia shares on the Helsinki Exchanges as of April 30, 2002 of EUR 17.96.

On April 30, 2002, the total outstanding exercisable warrants and stock options held by all participants in the Nokia stock option plans, including the Group Executive Board, called for 128.9 million shares, with a total potential realizable value on April 30, 2002 of EUR 722.5 million. On April 30, 2002, there were outstanding unexercisable warrants and stock options for a total of 79.7 million shares, with a potential realizable value of EUR 1.5 million on April 30, 2002. The potential realizable value for both the outstanding exercisable and unexercisable warrants and stock options is based on the difference between the exercise price of the warrants and stock options (post split) and the closing market price of Nokia shares on the Helsinki Exchanges as of April 30, 2002 of EUR 17.96.

Stock Ownership Guidelines for Executive Management

The goal of our long-term, equity-based incentive awards is to recognize progress towards the achievement of our strategic objectives, and to focus executives on building value for shareholders. In addition to stock option grants, we strongly encourage stock ownership by our top executives. In January 2001, we introduced a stock ownership commitment guideline with minimum recommendations tied to annual fixed salaries. For the members of the Group Executive Board, the recommended minimum investment in our shares corresponds to two times the member's annual base salary, to be fulfilled within five years of the introduction of the guideline.

Nokia Stock Option Plans

For a description of the existing Nokia stock option plans, in some of which the Group Executive Board members participate, please see note 21 to our consolidated financial statements included in Item 18 of this Form 20-F.

Other Employee Plans Related to Equity

Unlike our other stock option plans, the plans described below do not result in an increase of our share capital.

In 1999 we introduced a stock option plan available to our employees in the United States and Canada: the Nokia Holding Inc. 1999 Stock Option Plan. For more information on this plan, see note 21 to our consolidated financial statements included in Item 18 of this Form 20-F.

In 2000, we introduced an Employee Share Purchase Plan, which permits all full-time Nokia employees located in the United States to acquire Nokia ADSs at a 15% discount. The ADSs to be purchased are funded through monthly payroll deductions from the salary of the participants, and the ADSs are purchased on a monthly basis. As of April 30, 2002, a total of 667,177 ADSs had been purchased under the plan and there were a total of approximately 1,300 participants.

In connection with the acquisition of Ipsilon, we assumed Ipsilon's 1995 stock option plan. The former employees, officers and directors of Ipsilon are eligible to participate in this plan. We intend to issue no more options pursuant to this plan. As of April 30, 2002, options to purchase 700,396 ADSs were outstanding at an average exercise price of USD 24.26 per ADS.

In connection with the acquisition of certain US corporations, we have replaced stock options held by the employees, officers or consultants of the acquired corporations immediately prior to the respective acquisition with stock options that entitle those persons to purchase Nokia ADSs. The maximum aggregate number of ADSs that may be issued under these arrangements is 7,050,000. As of April 30, 2002, options to purchase 3,919,885 ADSs were outstanding at an average exercise price of USD 16.25 per ADS.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

7.A Major Shareholders

Janus Capital Corporation informed us on December 9, 1999 that its holdings of Nokia shares exceeded 5% of our total share capital. Janus Capital Corporation informed us on July 26, 2001 that its ownership position had decreased below 5% of our total share capital. Janus Capital Corporation does not have any different voting rights than other shareholders. Its address is 100 Fillmore Street, Denver, Colorado, 80206-4923, United States.

No persons are known by Nokia to hold currently more than 5% of the voting securities of Nokia Corporation. As far as we know, Nokia is not directly or indirectly owned or controlled by another corporation or by any government, and there are no arrangements that may result in a change of control of the company.

As at April 30, 2002, 1,418,362,377 ADSs (equivalent to 1,418,362,377 shares or approximately 29.9% of the total outstanding shares) were outstanding and held of record by 22,801 registered holders in the United States. We are aware that many ADSs are held of record by brokers and other nominees and accordingly the above numbers are not necessarily representative of the actual number of persons who are beneficial holders of ADSs or the number of ADSs beneficially held by such persons. Based on information available from ADP, the number of beneficial owners of ADSs as of April 30, 2002 was approximately 1.4 million.

As at April 30, 2002, there were approximately 121,818 holders of record of our shares. Of these holders, around 747 had registered addresses in the United States and held a total of some 10,600,000 of our shares, approximately 0.2% of the total outstanding shares. In addition, certain accounts of record with registered addresses other than in the United States hold our shares, in whole or in part, beneficially for United States persons.

7.B Related Party Transactions

There have been no material transactions during the last three fiscal years to which any director, executive officer or 5% shareholder, or any relative or spouse of any of them, was a party. There is no significant outstanding indebtedness owed to the company by any director, executive officer or 5% shareholder.

There are no material transactions with enterprises controlling, controlled by or under common control with Nokia or associates of Nokia.

See note 31 to our consolidated financial statements included in Item 18 of this Form 20-F.

7.C Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

8.A Consolidated Statements and Other Financial Information

8.A.1 See Item 18 for our audited consolidated financial statements.

8.A.2 See Item 18 for our audited consolidated financial statements, which cover the last three financial years.

8.A.3 See pages F-1 and F-2 for the audit reports of our accountants, each entitled "Report of Independent Accountants."

8.A.4 Not applicable.

8.A.5 Not applicable.

8.A.6 See note 2 to our consolidated financial statements included in Item 18 of this Form 20-F for the amount of our export sales.

8.A.7 Litigation We are party to routine litigation incidental to the normal conduct of our business. Our management does not believe that liabilities related to these proceedings, in the aggregate, are likely to be material to our financial condition or results of operations.

We and several other mobile phone manufacturers, distributors and network operators have been named as defendants in a series of class action suits filed in various US jurisdictions. These cases have been consolidated and are now before a US federal court in Baltimore, Maryland, United States. The actions have been brought on behalf of a purported class of persons in the United States as a whole consisting of all individuals that purchased cellular phones without a headset. In general, the complaints in the actions allege that the defendants should have included a headset with every hand held cellular telephone as a means of reducing any potential health risk associated with the telephone's use, and assert causes of action based on negligence, fraud and misrepresentation. The relief sought by the complaint includes unspecified amounts of compensation for phone and headset costs, and attorneys' fees.

We have also been named as a defendant along with other mobile phone manufacturers and network operators in four lawsuits by individual plaintiffs who allege that the radio emissions from mobile phones caused or contributed to each plaintiff's brain tumor. The cases have been consolidated and are now before a US federal court in Washington, D.C.

We believe that the allegations described above are without merit, and intend to defend these actions vigorously. The courts that have reviewed similar matters to date have found that there is no reliable scientific basis for the plaintiffs' claims. Based upon the information currently available, management does not expect the resolution of these matters to have a material adverse effect on our financial condition or results of operations.

One of our customers in Turkey, Telsim Mobil Telekomunikasyon Hiz. A.S., has defaulted on its obligations under a financing arrangement secured by us. We have written off our total financing exposure to Telsim. In 2001, we wrote off EUR 669 million in connection with this. In accordance with the terms of the financing documentation, the matter has been submitted to arbitration proceedings, which we are vigorously pursuing to recover all amounts due to us. In addition, we have commenced, in conjunction with co-plaintiff Motorola Credit Corporation, a lawsuit in a US federal court in New York, United States against individual members of the Uzan family and certain corporations affiliated with and controlled by the Uzans. The lawsuit alleges that the defendants violated the Racketeering Influenced and Corrupt Organizations Act by fraudulently inducing us and Motorola, through a pattern of fraudulent and illegal conduct, to provide financing to Telsim, which is owned and controlled by the Uzans and their affiliates. Simultaneous with the filing of the lawsuit, we and Motorola obtained temporary injunctive relief, which was subsequently made permanent, prohibiting the defendants from, among other things, removing or transferring assets from Telsim and transferring or encumbering certain real and personal property located in New York owned by the defendants.

8.A.8 See "Item 3.A Selected Financial Data—Distribution of Earnings" for a discussion of our dividend policy.

8.B Significant Changes

No significant changes have occurred since the date of our consolidated financial statements included in this Form 20-F. See "Item 5.D Trend Information."

ITEM 9. THE OFFER AND LISTING

9.A Offer and Listing Details

Our capital consists of shares traded on the Helsinki Exchanges under the symbol "NOK1V." American Depositary Shares, or ADSs, each representing one of our shares are traded on the New York Stock Exchange under the symbol "NOK." The ADSs are evidenced by American Depositary Receipts, or ADRs, issued by Citibank, N.A., as Depositary under the Amended and Restated Deposit Agreement dated as of March 28, 2000, among Nokia, Citibank, N.A. and registered holders from time to time of ADRs. ADSs were first issued in July 1994.

The table below sets forth, for the periods indicated, the reported high and low quoted prices for our shares on the Helsinki Exchanges and the high and low quoted prices for the shares, in the form of ADSs, on the New York Stock Exchange. In each of 1998 and 1999, Nokia effected a two-for-one share split, effective in public trading on April 16, 1998, and April 12, 1999, respectively. In 2000, Nokia effected a four-for-one share split, effective in public trading on

April 10, 2000. Price per share and price per ADS figures for 1998 and 1999 have been adjusted accordingly.

	Helsinki Exchanges				New York Stock Exchange	
	Price per K share		Price per A share		Price per ADS	
	High	Low	High	Low	High	Low
	EUR		EUR		USD	
1997	5.47	2.72	5.75	2.74	6.36	3.48
1998	13.41	3.89	13.41	3.87	15.60	4.26
1999⁽¹⁾	—	—	45.00	13.74	47.77	15.94
2000						
First Quarter	—	—	59.81	39.50	57.50	38.25
Second Quarter	—	—	64.88	48.08	61.88	45.00
Third Quarter	—	—	60.60	42.50	56.38	38.13
Fourth Quarter	—	—	57.66	35.81	51.38	29.44
Full Year	—	—	64.88	35.81	61.88	29.44
2001						
First Quarter	—	—	46.50	23.40	44.69	21.34
Second Quarter	—	—	39.40	25.10	35.01	21.25
Third Quarter	—	—	27.25	14.35	22.62	12.95
Fourth Quarter	—	—	28.96	16.50	25.53	15.20
Full Year	—	—	46.50	14.35	44.69	12.95
2002						
First Quarter	—	—	29.45	22.39	26.90	19.41
Most recent six months						
November 2001	—	—	28.45	23.17	25.24	21.27
December 2001	—	—	28.96	25.67	25.53	22.68
January 2002	—	—	29.45	23.88	26.90	21.15
February 2002	—	—	27.26	22.39	23.57	19.41
March 2002	—	—	27.70	23.80	24.04	20.74
April 2002	—	—	23.45	17.68	20.94	15.77

⁽¹⁾ K and A shares were consolidated on April 9, 1999, into one class of shares.

9.B Plan of Distribution

Not applicable.

9.C Markets

The principal trading markets for the shares are the New York Stock Exchange, in the form of ADSs, and the Helsinki Exchanges, in the form of shares. In addition, the shares are listed on the London, Frankfurt, Stockholm and Paris stock exchanges.

9.D Selling Shareholders

Not applicable.

9.E Dilution

Not applicable.

9.F Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

10.A Share Capital

Not applicable.

10.B Memorandum and Articles of Association

Registration

Nokia is organized under the laws of the republic of Finland and registered under the business identity code 0112 038 - 9. Nokia's corporate purpose under Article 1 of the articles of association is to engage in the telecommunications industry and other sectors of the electronics industry, including the manufacture and marketing of telecommunications systems and equipment, mobile phones, consumer electronics and industrial electronic products. We also may engage in other industrial and commercial operations, as well as securities trading and other investment activities.

Director's Voting Powers

Under Finnish law, a director shall refrain from taking any part in the consideration of a contract or other issue that may provide any material benefit to him. There is no age limit requirement for directors, and there are no requirements under Finnish law that a director must own a minimum number of shares in order to qualify to act as a director. Under Finnish law, a company may lend funds to a director only out of the distributable profits and against sufficient collateral. However, lending for the purpose of acquiring the company's shares is not permitted.

Share Rights, Preferences and Restrictions

For a description of dividend rights attaching to our shares, see "Item 3.A Selected Financial Data—Distribution of Earnings." Dividend entitlement lapses after ten years, if a dividend remains unclaimed for that period, in which case the unclaimed dividend will be retained by Nokia.

Each share confers the right to one vote. Votes may be used at general meetings called by the Board of Directors. According to Finnish law, a company generally must hold an annual general meeting once a year. In addition, the board is obliged to call an extraordinary general meeting at the request of shareholders representing a minimum of one tenth of all outstanding shares. The members of the board are elected for a term of one year at each Annual General Meeting.

Under Finnish law, shareholders may attend and vote at a general meeting in person or by proxy. It is not customary in Finland for a company to issue forms of proxy to its shareholders. Accordingly, Nokia does not do so. However, registered holders and beneficial owners of ADSs are issued forms of proxy by the Depositary.

To attend and vote at a general meeting, a shareholder must be registered in the register of shareholders in the Finnish book-entry system. A registered holder or a beneficial owner of the ADSs, like other beneficial owners whose shares are registered in the company's register of shareholders in the name of a nominee, may vote his shares provided that he arranges to have his name entered in the temporary register of shareholders as of the record date of the meeting.

According to an amendment to Finnish law effective as of January 1, 2001, the record date is the tenth calendar day preceding the meeting. To be entered into the temporary register of shareholders as of the record date of the meeting, a holder of ADSs must provide the Depositary, or have his broker or other custodian provide the Depositary, on or before the voting deadline as well as the blocking deadline if any, as defined in the proxy material issued by the Depositary, a proxy including the name, address, and social security number or another corresponding personal identification number of, and the number of shares to be voted by, the holder of the ADSs, in addition to voting instructions. The register of shareholders as of the record date of each general meeting is public until the end of the respective meeting.

As a further prerequisite for attending and voting at a general meeting, shareholders must give notice to Nokia of their intention to attend no later than the date and time specified by the Board of Directors in the notice of the meeting. By completing and returning the form of proxy provided by the Depositary, a holder of ADSs authorizes the Depositary to give this notice.

Each of our shares confers equal rights to share in our profits, and in any surplus in the event of our liquidation.

Under Finnish law, the rights of shareholders related to shares are as stated by law and in our articles of association. Amendment of the articles of association requires a decision of the general meeting, supported by two-thirds of the votes cast and two-thirds of the shares represented at the meeting.

Disclosure of Shareholder Ownership

According to the Securities Market Act of 1989, as amended, a shareholder shall disclose his ownership to the company and the Financial Supervision when it reaches, exceeds or goes below 1/20, 1/10, 3/20, 1/5, 1/4, 1/3, 1/2 or 2/3 of all the shares outstanding. The term "ownership" includes ownership by the shareholder, as well as selected related parties.

Purchase Obligation

Our articles of association require a shareholder that holds one-third or one-half of all of our shares to purchase the shares of all other shareholders that request that he do so, at a price generally based on the historical weighted average trading price of the shares. A shareholder of this magnitude also is obligated to purchase any subscription rights, stock options, warrants or convertible bonds issued by the company if so requested by the holder.

Under the Securities Market Act of 1989, as amended, a shareholder whose holding exceeds two-thirds of the total voting rights in a company shall, within one month, offer to purchase the remaining shares of the company, as well as any subscription rights, warrants, convertible bonds or stock options issued by the company. The purchase price shall be the market price of the securities in question. The market price is determined, among other things, on the basis of the average of the prices paid for the security in public trading during the preceding twelve months, and any higher price paid by the shareholder, as well as any other special circumstances.

Under the Companies Act of 1978, as amended, a shareholder whose holding exceeds nine-tenths of the total number of shares or voting rights in Nokia has both the right and the obligation to purchase all the shares of the minority shareholders for the current price. The current price is determined, among other things, on the basis of the recent market price of the shares. The purchase procedure under the Companies Act differs, and the purchase price may differ, from the purchase procedure and price under the Securities Market Act, as discussed above.

Pre-Emptive Rights

In connection with any offering of shares, the existing shareholders have a pre-emptive right to subscribe for shares offered in proportion to the amount of shares in their possession. However, a general meeting of shareholders may vote, by a majority of two-thirds of the votes cast and two-thirds of the shares represented at the meeting, to waive this pre-emptive right provided that, from the company's perspective, important financial grounds exist.

Under the Act on the Control of Foreigners' Acquisition of Finnish Companies of 1992, clearance by the Ministry of Trade and Industry is required for a non-resident of Finland, directly or indirectly, to acquire one-third or more of the voting power of a company. The Ministry of Trade and Industry may refuse clearance where the acquisition would jeopardize important national interests, in which case the matter is referred to the Council of State. These clearance requirements are not applicable if, for instance, the voting power is acquired in an issuance of shares that is proportional to the holder's ownership of the shares. Moreover, the clearance requirements do not apply to residents of countries in the European Economic Area or countries that have ratified the Convention on the Organization for Economic Cooperation and Development.

10.C Material Contracts

Nokia is not party to any material contract other than those entered into in the ordinary course of business.

10.D Exchange Controls

There are currently no Finnish laws which may affect the import or export of capital, or the remittance of interest or other payments.

10.E Taxation

General

The taxation discussion set forth below is intended only as a descriptive summary and does not purport to be a complete analysis or listing of all potential tax effects relevant to ownership of our shares represented by ADSs.

The statements of United States and Finnish tax laws set out below are based on the laws in force as of the date of this Form 20-F and may be subject to any changes in US or Finnish law, and in any double taxation convention or treaty between the United States and Finland, occurring after that date.

For purposes of this summary, beneficial owners of ADSs that are considered residents of the United States for purposes of the current income tax convention between the United States and Finland, referred to as the "Treaty," and that are entitled to the benefits of the Treaty under the "Limitation on Benefits" provisions contained in the Treaty, are referred to as "US Holders." Beneficial owners that are citizens or residents of the United States, corporations organized under US law, and US partnerships, estates or trusts (to the extent their income is subject to US tax either directly or in the hands of partners or beneficiaries) generally will be considered to be residents of the United States under the Treaty. Special rules apply to US Holders that are also residents of Finland and to citizens or residents of the United States that do not maintain a substantial presence, permanent home, or habitual abode in the United States. For purposes of this discussion, it is assumed that the Depositary and its custodian will perform all actions as required by the deposit agreement with the Depositary and other related agreements between the Depositary and Nokia.

Because this summary is not exhaustive of all possible tax considerations—such as situations involving persons that are dealers or whose functional currency is not the US dollar—holders of shares that are US Holders are advised to satisfy themselves as to the overall United States federal, state and local tax consequences, as well as to the overall Finnish tax consequences, of their ownership of ADSs and the underlying shares by consulting their own tax advisors. Holders of ADSs are also urged to consult their own tax advisors as to the overall tax consequences of their ownership of ADSs and the underlying shares. This summary does not discuss the treatment of ADSs that are held in connection with a permanent establishment or fixed base in Finland.

For the purposes of both the Treaty and the United States Internal Revenue Code of 1986, as amended, referred to as the Code, US Holders of ADSs will be treated as the owners of the underlying shares that are represented by those ADSs. The US federal income tax consequences to US Holders of ADSs, as discussed below, apply as well to US Holders of shares.

The holders of ADSs will, for Finnish tax purposes, be treated as the owners of the shares that are represented by the ADSs. The Finnish tax consequences to the holders of shares, as discussed below, also apply to the holders of ADSs.

Taxation of Cash Dividends

For US federal income tax purposes, the gross amount of dividends paid to US Holders of ADSs, including any related Finnish withholding tax, will be treated as gross income to the holder at the time it is received. Dividends of this type will not be eligible for the dividends received deduction allowed to corporations under Section 243 of the Code. The amount includable in income will equal the US dollar value of the payment, determined at the time such payment is received by the custodian, regardless of whether the payment is in fact converted into US dollars. Generally, any gain or loss resulting from currency exchange rate fluctuations during the period between the time such payment is received and the date the dividend payment is converted into US dollars will be treated as ordinary income or loss to such holder.

Under the Finnish Act on Taxation of Non-residents' Income and Wealth, non-residents of Finland are generally subject to a withholding tax at a rate of 29% payable on dividends paid by a company. However, pursuant to the Treaty, dividends paid to US Holders will generally be subject to Finnish withholding tax at a reduced rate of 15% of the gross amount of such dividend.

Subject to conditions and limitations, Finnish withholding taxes will be treated as foreign taxes eligible for credit against a US Holder's US federal income tax liability. Dividends received with respect to the ADSs will generally constitute foreign source passive income for foreign tax credit purposes, but in some circumstances may constitute financial services income or general limitation basket income. In lieu of a credit, a US Holder of ADSs may elect to deduct all of his foreign taxes.

Further, in accordance with the imputation system of taxation of dividends, the Finnish corporate income tax paid by a company can, in the case of a shareholder that is a resident of Finland and, therefore, liable for Finnish income tax, be credited against the Finnish income tax of the shareholder to the extent that it relates to the dividends distributed to the shareholder. However, the tax paid by a company cannot be credited against the Finnish income taxes, if any, of a US Holder.

Tax on Sale or Exchange

A US Holder will recognize taxable gain or loss on the sale or exchange of ADSs. If the ADSs are held as a capital asset, this gain or loss will be long-term capital gain or loss if, at the time of the sale or exchange, the ADSs have been held for more than one year. Any capital gain, for foreign

tax credit purposes, generally will constitute US source income. US Holders should consult their tax advisors regarding the source of loss recognized on the sale or other disposition of ADSs. In the case of a US Holder that is an individual, any capital gain generally will be subject to US federal income tax at preferential rates if specified minimum holding periods are met.

The sale by a US Holder of the ADSs or the underlying shares, other than an individual that, by reason of his residence in Finland for a period exceeding six months, is or becomes liable for Finnish income tax according to the relevant provisions of Finnish tax law, generally will not be subject to income tax in Finland, in accordance with Finnish tax law and the Treaty.

Finnish Capital Taxes

Under the Treaty, the holding of ADSs or the underlying shares by US Holders generally will not subject a US Holder to Finnish tax on net capital.

Finnish Transfer Tax

Transfers of shares will be, and transfers of ADSs may be, subject to the Finnish transfer tax only when one of the parties to the transfer is subject to Finnish taxation under the Finnish Income Tax Act by virtue of being a resident of Finland or a Finnish branch of a non-Finnish credit institution. In case the Finnish Transfer Tax Act is applicable, transfer tax, however, would not be payable on stock exchange transfers. Otherwise, the transfer tax would be payable at the rate of 1.6% of the transfer value of the security traded.

Finnish Inheritance and Gift Taxes

A transfer of an underlying share by gift or by reason of the death of a US Holder and the transfer of an ADS are not subject to Finnish gift or inheritance tax provided that none of the deceased person, the donor, the beneficiary of the deceased person or the recipient of the gift is resident in Finland.

Non-Residents of the United States

Beneficial owners of ADSs that are not US Holders will not be subject to US federal income tax on dividends received with respect to ADSs unless this dividend income is effectively connected with the conduct of a trade or business within the United States. Similarly, non-US Holders generally will not be subject to US federal income tax on the gain realized on the sale or disposition of ADSs, unless (a) the gain is effectively connected with the conduct of a trade or business in the United States or (b) in the case of an individual, that individual is present in the United States for 183 days or more in the taxable year of the disposition and other conditions are met.

US Information Reporting and Backup Withholding

Dividend payments with respect to ADSs and proceeds from the sale, exchange or redemption of ADSs may be subject to information reporting to the Internal Revenue Service and possible US backup withholding at rates of up to 30%. Backup withholding will not apply to you, however, if you furnish a correct taxpayer identification number or certificate of foreign status and make any other required certification or if you are otherwise exempt from backup withholding. Amounts withheld as backup withholding may be credited against your US federal income tax liability, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and furnishing any required information.

You should consult your own tax advisor regarding the application of the information reporting and backup withholding rules, including the final regulations.

10.F Dividends and Paying Agents

Not applicable.

10.G Statement by Experts

Not applicable.

10.H Documents on Display

The documents referred to in this report can be read at the Securities and Exchange Commission's public reference facilities at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 205491.

10.I Subsidiary Information

Not applicable.

10.J Matters Related to Auditors

PricewaterhouseCoopers Oy served as Nokia's independent public accountants for the fiscal year ended December 31, 2001. The auditors are appointed annually by the Annual General Meeting.

The following table presents the aggregate fees for professional audit services and other services rendered by PricewaterhouseCoopers to Nokia in 2001.

Fees Paid to PricewaterhouseCoopers

	EURm
Audit fees ⁽¹⁾	5.4
Audit related fees and tax matters	9.2
Other	12.9
Total	<u>27.5</u>

⁽¹⁾ Included within audit fees are EUR 2.6 million of fees billed in 2001 relating to the 2000 year-end audit and EUR 0.7 million of accrued audit fees for the year-end that were not billed until 2002.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Nokia's overall risk management philosophy is based on having a corporate-wide view on key-risks including strategic, operational, financial and hazard risks. Risk management in Nokia means a systematic and pro-active way to analyze, review and manage all opportunities, threats and risks related to the Group's activities.

The principles documented in the Group's risk policy and accepted by the Nokia Board require that risk management is integrated into each business process. Business or function owners always have risk ownership. Key risks are reported to the Group level to enable group-wide risk management. There are specific risk management policies covering, for example, treasury and customer finance risks.

Financial Risks

The key financial targets for Nokia are growth, profitability, operational efficiency and a strong balance sheet. The objective for the treasury function is twofold: to guarantee cost efficient

funding for the group at all times, and to identify, evaluate and hedge financial risks in close co-operation with the business groups. There is a strong focus in Nokia on creating shareholder value. The treasury function supports this aim by minimizing the adverse effects caused by fluctuations in the financial markets on the profitability of the underlying businesses and thus on the financial performance of Nokia, and by managing the balance sheet structure of the Group.

Nokia has treasury centers in Geneva, Singapore (with a satellite office in Beijing) and Dallas (with a satellite office in Sao Paolo), and a corporate treasury unit in Espoo. This international organization enables Nokia to provide the Group companies with financial services according to local needs and requirements.

The treasury function is governed by policies approved by top management. These policies provide principles for overall financial risk management and determines the allocation of responsibilities for financial risk management in Nokia. These policies cover specific areas such as foreign exchange risk, interest rate risk, the use of derivative financial instruments as well as liquidity and credit risk. Treasury policies in Nokia are risk averse. Business groups have detailed standard operating procedures supplementing the treasury policies in financial risk management related issues.

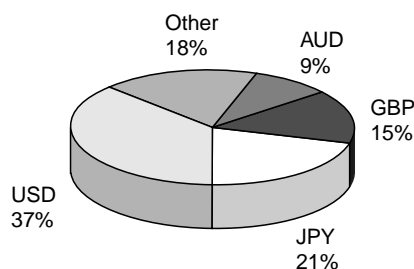
Market risk

Foreign exchange risk

Nokia operates globally and is thus exposed to foreign exchange risk arising from various currency combinations. Foreign currency denominated assets and liabilities, together with expected cash flows from highly probable purchases and sales, give rise to this foreign exchange risk exposure. We manage this exposure against various local currencies because of our substantial production and sales outside the Eurozone.

Due to changes in the business environment, currency combinations may also change within the financial year. The most significant non-euro sales currencies during 2001 were the US dollar, the British pound and the Australian dollar. In general, the appreciation of the euro against other currencies has an adverse effect on Nokia's sales and operating profit in the medium to long-term, while the depreciation of the euro has a positive effect. The only significant non-euro purchasing currencies are the US dollar and the Japanese yen.

The following diagram shows a break-down by currency of our underlying foreign exchange transaction exposure at December 31, 2001:



According to the foreign exchange policy guidelines of the Group, we hedge foreign exchange risk exposure in connection with material transactions. This exposure is mainly hedged with derivative financial instruments such as forward foreign exchange contracts and foreign exchange options. The majority of financial instruments that we use to hedge foreign exchange risk have a duration of less than a year. The Group does not hedge forecasted foreign currency cash flows beyond two

years. We use both fair value and cash flow foreign currency hedges to manage our exposure to foreign exchange risk.

We use the Value-at-Risk methodology (“VaR”) to assess the foreign exchange risk related to the treasury management of the Group’s exposure. The VaR figure represents the potential losses for a portfolio resulting from adverse changes in market factors using a specified time period and confidence level based on historical data. To correctly take into account the non-linear price function of certain derivative instruments, Nokia uses Monte Carlo simulation. Volatilities and correlations are calculated from a one-year set of daily data. The VaR figures assume that the forecasted cash flows materialize as expected. The VaR figures for transaction foreign exchange exposure, including hedging transactions in the Group with a one-week horizon and 95% confidence level, are shown in Table 1, below.

Table 1

Transaction foreign exchange position Value-at-Risk

VaR	2001	2000
	EURm	EURm
December 31	16.0	12.9
Average	20.2	9.1
Range	16.0-32.7	1.8-13.7

Since Nokia has subsidiaries outside the Eurozone, the euro-denominated value of the shareholder equity of Nokia is also exposed to fluctuations in exchange rates. Equity changes caused by movements in foreign exchange rates are shown as a translation difference in our consolidated financial statements included in Item 18 of this Form 20-F. Nokia uses, from time to time, foreign exchange contracts and foreign currency denominated loans to hedge its equity exposure arising from foreign net investments.

Interest rate risk

The Group is exposed to interest rate risk through market value fluctuations of balance sheet items (i.e. price risk) and through changes in interest income or expenses (i.e. re-investment risk). Interest rate risk mainly arises through interest-bearing liabilities and assets. Estimated future changes in cash flows and balance sheet structure also expose the Group to interest rate risk.

Each Group company is responsible for managing its own short-term liquidity position, whereas the interest rate exposure of the Group is monitored and managed in treasury. Due to the current balance sheet structure of Nokia, we emphasize managing the interest rate risk of investments.

Nokia uses the VaR methodology to assess and measure the interest rate risk in investment portfolios, which are benchmarked against a one-year investment horizon. The VaR figure represents the potential losses for a portfolio resulting from adverse changes in market factors using a specified time period and confidence level based on historical data. The specific VaR methodology that Nokia uses for interest rate risk is variance-covariance methodology. Volatilities and correlations are calculated from a one-year set of daily data. The VaR based net interest rate risk figures for financial items in the Group with a one-week horizon and 95% confidence level are shown in Table 2, below.

Table 2*Treasury investment portfolio Value at Risk*

<u>VaR</u>	<u>2001</u>	<u>2000</u>
	<u>EURm</u>	<u>EURm</u>
At December 31	6.4	2.9
Average for the year	4.2	3.1
Range for the year	1.8-8.1	1.8-4.7

Equity price risk

Nokia has certain strategic minority investments in publicly traded companies. These investments are classified as available-for-sale. The fair value of the equity investments on December 31, 2001 was EUR 169 million (EUR 140 million in 2000).

There are currently no outstanding derivative financial instruments designated as hedges of these equity investments. The VaR figures for equity investments, shown in Table 3, below, have been calculated using the same principles as for interest rate risk.

Table 3*Equity investments Value at Risk*

<u>VaR</u>	<u>2001</u>	<u>2000</u>
	<u>EURm</u>	<u>EURm</u>
At December 31	8.6	5.4
Average for the year	6.4	
Range for the year	3.0-11.8	

In addition to the equity holdings in publicly traded companies referred to above, Nokia invests in private equity through Nokia Venture Funds. The book value of these private equity investments at December 31, 2001 was USD 130 million (USD 121 million in 2000). Nokia is also exposed to equity price risk on social security costs relating to our stock option plans. Nokia hedges this risk by entering into cash settled equity swaps.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15. [RESERVED]

ITEM 16. [RESERVED]

PART III

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

The following financial statements are filed as part of this Annual Report on Form 20-F:

Consolidated Financial Statements

Reports of Independent Accountants	F-1
Consolidated Profit and Loss Accounts	F-3
Consolidated Balance Sheets	F-4
Consolidated Cash Flow Statements	F-5
Consolidated Statements of Changes in Shareholders' Equity	F-7
Notes to the Consolidated Financial Statements	F-8

ITEM 19. EXHIBITS

- *1. Articles of Association of Nokia Corporation
- 6. See note 28 to our consolidated financial statements included in Item 18 of this Form 20-F for information on how earnings per share information was calculated
- 8. List of significant subsidiaries
- 10(a).1 Consent of PricewaterhouseCoopers, Helsinki, Finland, authorized public accountants
- 10(a).2 Consent of KPMG, Helsinki, Finland, authorized public accountants

* Incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 2000.

GLOSSARY OF TERMS

Access network: A network for the delivery of voice, data, text and images to end users.

ADSL (Asymmetric Digital Subscriber Line): A transmission system that supports high bit rates over existing copper twisted pair access networks, providing a high bit rate channel from the network toward an ATM end system and a lower bit rate channel from the ATM end system toward the network.

Analogue: A signaling technique in which signals are conveyed by continuously varying the frequency, amplitude or phase of the transmission.

ATM (Asynchronous Transfer Mode): Switching technology for high-speed transport (up to 622 megabytes per second) and switching of various types of data, voice and video signals.

Base station: Fixed transceiver (transmitter and receiver) equipment used for communicating with mobile phones in a mobile network. A base station may cover one or more cells or a part of a cell.

Bluetooth: Short range radio technology that expands wireless connectivity to personal and business mobile devices by enabling users to connect their mobile phones, computers, printers, digital cameras, network access points and other electronic devices to one another without cables.

Broadband network: A network that delivers higher bandwidth by using transmission channels capable of supporting data rates greater than the primary rate of 9.6 Kbit/s.

Circuit switching: Electronic communications via a dedicated channel, or circuit, for the duration of the communication.

CDMA (Code Division Multiple Access): A continuous digital transmission technology that uses a coding system to mix discrete voice signals together during transmission and then separates the signals at the end of transmission.

Cellular network: A mobile telephone network consisting of switching centers (digital exchanges), radio base stations and transmission equipment. A cellular telephone network services an area that is divided into a number of smaller regions, called cells. This facilitates a continuous connection between the base stations and the mobile phones. The connection is maintained even if the mobile phone user moves from the area covered by one base station to the area of another base station.

Core network: A combination of exchanges and the basic transmission equipment that together form the basis for network services.

DSL (Digital Subscriber Line): A method of transmission utilized to transmit high-speed data on any existing copper line or local loop to a subscriber's telephone or other end user device.

Digital: A signaling technique in which a signal is encoded into digits for transmission.

DVB (Digital Video Broadcasting): A standard for digital satellite, cable and terrestrial video broadcasting.

EDGE (Enhanced Data Rates for Global Evolution): A technology to boost cellular network capacity and increase data rates up to 384 Kbits/s.

ETSI (European Telecommunications Standards Institute) Standards: Standards produced by the ETSI that contain technical specifications laying down the characteristics required for a telecommunications product.

GPRS (General Packet Radio Services): A service that provides packet switched data, primarily for second generation GSM networks.

GSM (Global System for Mobile Communications): A digital cellular network that operates in the 900 MHz frequency band, the frequency adopted for use in most European and Asian countries, as well as the 1800 MHz band.

GSM 1900 system: A GSM-based cellular system that operates in the 1900 MHz frequency band (also referred to as PCS 1900 or DCS 1900).

IP (Internet Protocol): A network layer protocol that offers a connectionless Internetwork service and forms part of the TCP/IP protocol.

ISP (Internet Service Provider): A company that provides access to the Internet and World Wide Web via a fixed or mobile network.

Iu Interface: An interface standardized by the Third Generation Partnership Program. It enables multi-vendor interconnection between a core network and a radio network.

LAN (Local Area Network): A computer network that spans a small area. Most LANs are confined to a single building or group of buildings. However, one LAN can be connected to other LANs over any distance via telephone lines and radio waves. A system of LANs connected in this way is called a wide-area network (WAN).

MSP (Managed Service Provider): A company that manages information technology services for other companies by delivering outsourced IT management and problem resolution for e-business and mission-critical systems. MSPs ordinarily provide and manage their services remotely using an interactive Web page as the user interface.

OMA (Open Mobile Architecture): An industry-wide agreement on shared open standards and common platforms, which is expected to smooth the way for a global mass volume mobile services market, as well as bring greater freedom of choice for consumers.

Packet: Part of a message transmitted over a packet switched network.

Packet switching: A technique that enables digitized data to be chopped up into a number of packets—sometimes called datagrams—and sent out over various network routes to their location.

Platform, platform concept: A basic system on which different applications can be developed.

TCP/IP (Transmission Control Protocol/Internet Protocol): A public transmission protocol, originally defined by the US Department of Defense, that offers message routing and reliable data transmission.

TDMA (Time Division Multiple Access): A digital transmission technology that breaks voice signals into sequential pieces of a defined length, places each piece into an information conduit at specific intervals and then reconstructs the pieces at the end of the conduit.

TETRA (Terrestrial Trunked Radio): An open digital trunked radio standard defined by ETSI to meet the needs of the most demanding professional mobile radio users.

3G: Third generation communications technology.

VPN (Virtual Private Network): A private network built using a public network as a base.

WAP (Wireless Application Protocol): A global, license-free and platform-independent protocol designed for Internet content and advanced telephony services on digital cellular phones and other wireless terminals.

WCDMA (Wideband Code Division Multiple Access): A digital transmission technology based on CDMA and planned to be used as the air interface access method in the future third generation mobile systems.

xDSL: Various forms of Digital Subscriber Line technologies.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of
NOKIA CORPORATION

We have audited the accompanying consolidated balance sheets of Nokia Corporation and Subsidiaries as of December 31, 2001 and 2000, and the related consolidated statements of profit and loss and cash flow for the years ended December 31, 2001 and 2000, all expressed in euros. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Nokia Corporation and Subsidiaries as of December 31, 2001 and 2000 and the consolidated results of their operations and cash flows for the years ended December 31, 2001 and 2000, in conformity with International Accounting Standards.

International Accounting Standards vary in certain respects from accounting principles generally accepted in the United States. The application of the latter would have affected the determination of consolidated net profit for the year ended December 31, 2001 and 2000, and the determination of consolidated shareholders' equity at December 31, 2001 and 2000, to the extent summarized in Note 37 to the consolidated financial statements.

Espoo, Finland
January 24, 2002

/s/ PRICEWATERHOUSECOOPERS OY

PricewaterhouseCoopers Oy
Authorized Public Accountants

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of
NOKIA CORPORATION

We have audited the accompanying consolidated statement of profit and loss and cash flow of Nokia Corporation and Subsidiaries for the year ended December 31, 1999, all expressed in euros. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in Finland, which are substantially the same as those followed in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated results of operations and cash flows of Nokia Corporation and Subsidiaries for the year ended December 31, 1999, in conformity with International Accounting Standards.

International Accounting Standards vary in certain respects from accounting principles generally accepted in the United States. The application of the latter would have affected the determination of consolidated net profit for the year ended December 31, 1999, to the extent summarized in Note 37 to the consolidated financial statements.

Espoo, Finland
February 1, 2000

/s/ LARS BLOMQUIST

Lars Blomquist
Authorized Public Accountant
PricewaterhouseCoopers

/s/ ERIC HAGLUND

Eric Haglund
Authorized Public Accountant
KPMG

Nokia Corporation and Subsidiaries
Consolidated Profit and Loss Accounts

	Notes	Financial year ended December 31,		
		2001	2000	1999
		EURm	EURm	EURm
Net sales		31,191	30,376	19,772
Cost of sales		(19,787)	(19,072)	(12,227)
Research and development expenses		(2,985)	(2,584)	(1,755)
Selling, general and administrative expenses	6	(3,443)	(2,804)	(1,811)
One-time customer finance charges		(714)	—	—
Impairment of minority investments		(80)	—	—
Impairment of goodwill		(518)	—	—
Amortization of goodwill		(302)	(140)	(71)
Operating profit	2, 3, 4, 5, 6, 7, 9	3,362	5,776	3,908
Share of results of associated companies ...		(12)	(16)	(5)
Financial income and expenses	10	125	102	(58)
Profit before tax and minority interests ..		3,475	5,862	3,845
Tax	11	(1,192)	(1,784)	(1,189)
Minority interests		(83)	(140)	(79)
Net profit		2,200	3,938	2,577
		2001	2000	1999
Earnings per share	28	EUR	EUR	EUR
Basic		0.47	0.84	0.56
Diluted		0.46	0.82	0.54
Average number of shares (000's shares) ..	28	2001	2000	1999
Basic		4,702,852	4,673,162	4,593,761
Diluted		4,787,219	4,792,980	4,743,184

See Notes to Consolidated Financial Statements.

Nokia Corporation and Subsidiaries
Consolidated Balance Sheets

		As at December 31,	
	Notes	2001	2000
		EURm	EURm
ASSETS			
Fixed assets and other non-current assets			
Capitalized development costs	12	893	640
Goodwill	12	854	1,112
Other intangible assets	12	237	242
Property, plant and equipment	13	2,514	2,732
Investments in associated companies	14	49	61
Available-for-sale investments	15	399	337
Deferred tax assets	24	832	401
Long-term loans receivable	16	1,128	808
Other non-current assets		6	55
		<u>6,912</u>	<u>6,388</u>
Current assets			
Inventories	17, 19	1,788	2,263
Accounts receivable, less allowances for doubtful accounts (2001: EUR 217 million, 2000: EUR 236 million)	18, 19	5,719	5,594
Prepaid expenses and accrued income	18	1,480	1,418
Short-term loan receivable		403	44
Available-for-sale investments	15, 34	4,271	2,774
Bank and cash		1,854	1,409
		<u>15,515</u>	<u>13,502</u>
Total assets		<u><u>22,427</u></u>	<u><u>19,890</u></u>
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital	21	284	282
Share issue premium		2,060	1,695
Treasury shares, at cost		(21)	(157)
Translation differences		326	347
Fair value and other reserves	20	20	—
Retained earnings	22	9,536	8,641
		<u>12,205</u>	<u>10,808</u>
Minority interests		196	177
Long-term liabilities	23		
Long-term interest-bearing liabilities		207	173
Deferred tax liabilities	24	177	69
Other long-term liabilities		76	69
		<u>460</u>	<u>311</u>
Current liabilities			
Short-term borrowings	25	831	1,069
Current portion of long-term debt	23	—	47
Accounts payable		3,074	2,814
Accrued expenses	26	3,477	2,860
Provisions	27	2,184	1,804
		<u>9,566</u>	<u>8,594</u>
Commitments and contingencies	29		
Total shareholders' equity and liabilities		<u><u>22,427</u></u>	<u><u>19,890</u></u>

See Notes to Consolidated Financial Statements.

Nokia Corporation and Subsidiaries
Consolidated Cash Flow Statements

	Notes	Financial year ended December 31,		
		2001 EURm	2000 EURm	1999 EURm
Cash flow from operating activities				
Net profit		2,200	3,938	2,577
Adjustments, total	33	4,132	2,805	1,928
Net profit before change in net working capital		6,332	6,743	4,505
Change in net working capital	33	978	(1,377)	(21)
Cash generated from operations		7,310	5,366	4,484
Interest received		226	255	189
Interest paid		(155)	(115)	(212)
Other financial income and expenses		99	(454)	(113)
Income taxes paid		(933)	(1,543)	(1,246)
Net cash from operating activities		6,547	3,509	3,102
Cash flow from investing activities				
Acquisition of Group companies, net of acquired cash		(131)	(400)	(178)
Purchase of non-current available-for-sale investments		(323)	(111)	(37)
Additions to capitalized development costs		(431)	(393)	(271)
Long-term loans made to customers		(1,129)	(776)	—
Proceeds from (+) / payment of (-) other long-term receivables		84	—	(171)
Proceeds from (+), payment of (-) short-term receivables		(114)	378	128
Capital expenditures		(1,041)	(1,580)	(1,302)
Proceeds from disposal of shares in Group companies, net of disposed cash		—	4	27
Proceeds from sale of non-current available-for-sale investments		204	75	121
Proceeds from sale of fixed assets		175	221	318
Dividends received		27	51	6
Net cash used in investing activities		(2,679)	(2,531)	(1,359)
Cash flow from financing activities				
Proceeds from share issue		77	72	152
Purchase of treasury shares		(21)	(160)	(25)
Capital investment by minority shareholders		4	7	28
Proceeds from long-term borrowings		102	—	—
Repayment of long-term borrowings		(59)	(82)	(6)
Proceeds from (+) / repayment of (-) short-term borrowings		(602)	133	(126)
Dividends paid		(1,396)	(1,004)	(597)
Net cash used in financing activities		(1,895)	(1,034)	(574)
Foreign exchange adjustment		(43)	80	99
Net increase in cash and cash equivalents		1,930	24	1,268
Cash and cash equivalents at beginning of period		4,183	4,159	2,891
Cash and cash equivalents at end of period		6,113	4,183	4,159
Change in net fair value of current available-for-sale investments		12	—	—
As reported on balance sheet		6,125	4,183	4,159

Nokia Corporation and Subsidiaries
Consolidated Cash Flow Statements (Continued)

	Notes	Financial year ended December 31,		
		2001 EURm	2000 EURm	1999 EURm
Movement in cash and cash equivalents:				
At beginning of year, as previously reported in 2000, 1999 and 1998, respectively		4,183	4,159	2,891
On adoption of IAS 39, remeasurement of current available-for-sale investments to fair value		42	—	—
At beginning of year, as restated		4,225	4,159	2,891
Net fair value gains (losses) on current available-for-sale investments		(30)	—	—
Net increase in cash and cash equivalents		1,930	24	1,268
As reported on balance sheet		6,125	4,183	4,159
At end of year, comprising:				
Bank and cash		1,854	1,409	1,023
Current available-for-sale investments (Note 34)		4,271	2,774	3,136
		6,125	4,183	4,159

The figures in the consolidated cash flow statement cannot be directly traced from the balance sheet without additional information as a result of acquisitions and disposals of subsidiaries and net foreign exchange differences arising on consolidation.

See Notes to Consolidated Financial Statements.

Nokia Corporation and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity

	Number of shares	Share capital	Share issue premium	Treasury shares	Translation differences ⁽¹⁾	Fair value and other reserves ⁽¹⁾	Retained earnings	Total
	(000's)	EURm	EURm	EURm	EURm	EURm	EURm	EURm
Balance at December 31, 1998	4,587,485	255	909	(110)	182	—	3,873	5,109
Share issue	66,414	3	191					194
Bonus issue		36	(36)					—
Cancellation of treasury shares		(15)	15	110			(110)	—
Acquisition of treasury shares	(1,220)			(24)			24	—
Dividend							(586)	(586)
Dividend on treasury shares							31	31
Translation differences					61			61
Other decrease, net							(8)	(8)
Net profit							2,577	2,577
Balance at December 31, 1999	4,652,679	279	1,079	(24)	243	—	5,801	7,378
Share issue	42,149	3	554					557
Acquisition of treasury shares	(3,252)			(160)				(160)
Reissuance of treasury shares	557			27				27
Stock options issued on acquisitions			75					75
Stock options exercised related to acquisitions			(13)					(13)
Dividend							(931)	(931)
Translation differences					104			104
Change in accounting policy							(206)	(206)
Other increase, net							39	39
Net profit							3,938	3,938
Balance at December 31, 2000	4,692,133	282	1,695	(157)	347	—	8,641	10,808
Effect of adopting IAS 39						(56)		(56)
Balance at January 1, 2001, restated	4,692,133	282	1,695	(157)	347	(56)	8,641	10,752
Share issue	41,386	2	407					409
Acquisition of treasury shares	(995)			(21)				(21)
Reissuance of treasury shares	3,778		(52)	157				105
Stock options issued on acquisitions			20					20
Stock options exercised related to acquisitions			(10)					(10)
Dividend							(1,314)	(1,314)
Translation differences					65			65
Net investment hedge losses					(86)			(86)
Cash flow hedges						76		76
Available-for-sale investments						0		0
Other increase, net							9	9
Net profit							2,200	2,200
Balance at December 31, 2001	4,736,302	284	2,060	(21)	326	20	9,536	12,205

⁽¹⁾ Accumulated other comprehensive income comprises translation differences and fair value and other reserves.

Dividends declared per share were EUR 0.27 for 2001 (EUR 0.28 for 2000 and EUR 0.20 for 1999), subject to shareholders' approval.

See Notes to Consolidated Financial Statements.

Notes to the Consolidated Financial Statements

1. Accounting principles

Basis of presentation

The consolidated financial statements of Nokia Corporation ("Nokia" or "the Group"), a Finnish limited liability company with domicile in Helsinki, are prepared in accordance with International Accounting Standards (IAS). The consolidated financial statements are presented in millions of euros (EURm) and are prepared under the historical cost convention except as disclosed in the accounting policies below. The notes to the consolidated financial statements also conform with Finnish Accounting legislation. On January 24, 2002, the Group's Board of Directors authorized these financial statements for issue.

In 2001 the Group adopted IAS 39—Financial Instruments: Recognition and Measurement. The effects of adopting the standard are summarized in the consolidated statement of changes in shareholders' equity, and further information is disclosed in accounting policies, Fair Valuing Principles and Hedge Accounting and in Notes 15, 20 and 34. In accordance with IAS 39, the comparative financial statements for the year ended December 31, 2000 and 1999 have not been restated.

Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Principles of consolidation

The consolidated financial statements include the accounts of Nokia's parent company ("Parent Company"), and each of those companies in which it either owns, directly or indirectly through subsidiaries, over 50% of the voting rights, or over which it has control of their operating and financial policies. The Group's share of profits and losses of associated companies (generally 20% to 50% voting rights or over which the Group has significant influence) is included in the consolidated profit and loss account in accordance with the equity method of accounting.

All inter-company transactions are eliminated as part of the consolidation process. Minority interests are presented separately in arriving at the profit from continuing operations. They are also shown separately from shareholders' equity and liabilities in the consolidated balance sheet.

Profits realized in connection with the sale of fixed assets between the Group and associated companies are eliminated in proportion to share ownership. Such profits are deducted from the Group's equity and fixed assets and released in the Group accounts over the same period as depreciation is charged.

The companies acquired during the financial period have been consolidated from the date on which control of the net assets and operations was transferred to the Group. Similarly the result of a Group company divested during an accounting period is included in the Group accounts only to the date of disposal.

Acquisitions of companies are accounted for using the purchase method of accounting. Goodwill represents the excess of the purchase cost over the fair value of assets less liabilities of acquired

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

companies. Goodwill is amortized on a straight-line basis over its expected useful life. Useful lives vary between two and five years depending upon the nature of the acquisition. Expected useful lives are reviewed at each balance sheet date and, where these differ significantly from previous estimates, amortization periods are changed accordingly.

Transactions in foreign currencies

Transactions in foreign currencies are recorded at the rates of exchange prevailing at the dates of the transactions. For practical reasons, a rate that approximates the actual rate at the date of the transaction is often used. At the end of the accounting period the unsettled balances on foreign currency receivables and liabilities are valued at the rates of exchange prevailing at the year-end. Foreign exchange gains and losses related to normal business operations are treated as adjustments to sales or to cost of sales. Foreign exchange gains and losses associated with financing are included as a net amount under financial income and expenses.

Foreign Group companies

In the consolidated accounts all items in the profit and loss accounts of foreign subsidiaries are translated into euro at the average exchange rates for the accounting period. The balance sheets of foreign Group companies are translated into euro at the rates of exchange ruling at the year-end. Exchange differences arising from the application of the purchase method are treated as an adjustment affecting consolidated shareholders' equity. Differences resulting from the translation of profit and loss account items at the average rate and the balance sheet items at the closing rate are also treated as an adjustment affecting consolidated shareholders' equity. On the disposal of a foreign Group company, the cumulative amount of the translation difference is recognized as income or as expense in the same period in which the gain or loss on disposal is recognized.

Fair valuing principles

At January 1, 2001 the Group adopted IAS 39—Financial Instruments: Recognition and Measurement. The impact of adopting the standard on shareholders' equity is quantified in Note 20.

Under IAS 39 the Group classifies its investments in marketable debt and equity securities and investments in unlisted equity securities into the following categories: held-to-maturity, trading, or available-for-sale depending on the purpose for acquiring the investments. All investments of the Group are currently classified as available-for-sale. Available-for-sale investments are fair valued by using quoted market rates, discounted cash flow analyses and other appropriate valuation models at the balance sheet date. Certain unlisted equities for which fair values cannot be measured reliably are reported at cost less impairment. All purchases and sales of investments are recorded on the trade date, which is the date that the Group commits to purchase or sell the asset.

The fair value changes of available-for-sale investments are recognized in shareholders' equity. When the investment is disposed of or permanently impaired the related accumulated fair value changes are recycled from shareholders' equity into the profit and loss account.

Fair values of forward rate agreements, interest rate options and futures contracts are calculated based on quoted market rates at the balance sheet date. Interest rate and currency swaps are

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

valued by using discounted cash flow analyses. The changes in the fair values of these contracts are reported in the profit and loss account.

Fair values of cash settled equity derivatives are calculated by revaluing the contract at year-end quoted market rates. Changes in fair value are calculated by comparing the fair value with the value calculated using the prevailing market rate at the inception of the contract. Changes in the fair value are reported in the profit and loss account.

Forward foreign exchange contracts are valued with the forward exchange rate. Changes in fair value are calculated by comparing this with the original amount calculated by using the contract forward rate prevailing at the beginning of the contract. Currency options are valued at the balance sheet date by using the Garman & Kohlhagen option valuation model. Changes in the fair value on these instruments are reported in the profit and loss account except to the extent they qualify for hedge accounting.

Embedded derivatives are identified and monitored in the Group and fair valued at the balance sheet date. The fair value changes are reported in financial income and expenses in the profit and loss account.

Hedge accounting

Hedging of anticipated foreign currency denominated sales and purchases

The Group is applying hedge accounting for “Qualifying hedges.” Qualifying hedges are those properly documented cash flow hedges of the foreign exchange rate risk of future anticipated foreign currency denominated sales and purchases that meet the requirements set out in IAS 39. The cash flow being hedged must be ‘highly probable’ and must ultimately impact the profit and loss account. The hedge must be highly effective both prospectively and retrospectively.

The Group claims hedge accounting in respect of forward foreign exchange contracts and options, or option strategies, which have zero net premium or a net premium paid, and where the terms of the bought and sold options within a collar or zero premium structure are the same.

For qualifying foreign exchange forwards the change in fair value is deferred in shareholders’ equity to the extent that the hedge is effective. For qualifying foreign exchange options the change in intrinsic value is deferred in shareholders’ equity to the extent that the hedge is effective. Changes in the time value are at all times taken directly to the profit and loss account.

Accumulated fair value changes from qualifying hedges are released from shareholders’ equity into the profit and loss account in the period when the hedged cash flow affects the profit and loss account. If the hedged cash flow is no longer expected to take place, all deferred gains or losses are released into the profit and loss account immediately. If the hedged cash flow ceases to be highly probable, but is still expected to take place, accumulated gains and losses remain in equity until the hedged cash flow affects the profit and loss account.

Changes in fair value of any derivative instruments that do not qualify under hedge accounting under IAS 39 are recognized immediately in the profit and loss account.

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

Foreign currency hedging of net investments

The Group also applies hedge accounting for its foreign currency hedging on net investments. Qualifying hedges are those properly documented hedges of the foreign exchange rate risk of foreign currency-denominated net investments that meet the requirements set out in IAS 39. The hedge must be effective both prospectively and retrospectively.

The Group claims hedge accounting in respect of forward foreign exchange contracts, foreign currency-denominated loans, and options, or option strategies, which have zero net premium or a net premium paid, and where the terms of the bought and sold options within a collar or zero premium structure are the same.

For qualifying foreign exchange forwards the change in fair value that reflects the change in spot exchange rates is deferred in shareholders' equity. The change in fair value that reflects the change in forward exchange rates less the change in spot exchange rates is recognized in the profit and loss account. For qualifying foreign exchange options the change in intrinsic value is deferred in shareholders' equity. Changes in the time value are at all times taken directly to the profit and loss account. If a foreign currency-denominated loan is used as a hedge, all foreign exchange gains and losses arising from the transaction are recognized in shareholders' equity.

Accumulated fair value changes from qualifying hedges are released from shareholders' equity into the profit and loss account only if the legal entity in the given country is sold or liquidated.

Revenue recognition

Sales from the majority of the Group are recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed and determinable and collectibility is probable.

Sales and cost of sales from contracts involving solutions achieved through modification of telecommunications equipment are recognized on the percentage of completion method when the outcome of the contract can be estimated reliably. Completion is measured using either the cost-to-cost input method or the milestone output method, depending upon the nature of the individual project and the most applicable measure of progress. Losses on projects in progress are recognized immediately when known and estimable. The cumulative impact of a revision in estimates is recorded in the period such revisions become known and estimable. Billings or costs incurred in excess of a project's progress to completion are recorded as unearned revenue or work-in-progress, respectively.

Shipping and handling costs

The costs of shipping and distributing products are included in cost of sales.

Research and development

Research and development costs are expensed in the financial period during which they are incurred, except for certain development costs which are capitalized when it is probable that a development project will be a success, and certain criteria, including commercial and technological feasibility, have been met. Capitalized development costs are amortized on a systematic basis over their expected useful lives. The amortization period is between 2 and 5 years.

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

Other intangible assets

Expenditure on acquired patents, trademarks and licenses is capitalized and amortized using the straight-line method over their useful lives, but not exceeding 20 years. Where an indication of impairment exists, the carrying amount of any intangible asset including goodwill is assessed and written down to its recoverable amount. Costs of software licenses associated with internal-use software are capitalized. These costs are included within other intangible assets and are amortized over a period not to exceed three years. All development costs, as well as maintenance and training costs, are expensed as incurred.

Pensions and coverage of pension liabilities

The Group companies have various pension schemes in accordance with the local conditions and practices in the countries in which they operate. The schemes are generally funded through payments to insurance companies or to trustee-administered funds as determined by periodic actuarial calculations.

The Group's contributions to defined contribution plans and to multi-employer and insured plans are charged to the profit and loss account in the period to which the contributions relate.

For defined benefit plans, principally the reserved portion of the Finnish TEL system, pension costs are assessed using the projected unit credit method: the cost of providing pensions is charged to the profit and loss account so as to spread the regular cost over the service lives of employees. The pension obligation is measured as the present value of the estimated future cash outflows using interest rates on government securities that have terms to maturity approximating the terms of the related liabilities. Actuarial gains and losses outside the corridor are recognized over the average remaining service lives of employees.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation. Depreciation is recorded on a straight-line basis over the expected useful lives of the assets as follows:

Buildings and constructions	20-33 years
Machinery and equipment	3-10 years

Land and water areas are not depreciated.

Maintenance, repairs and renewals are generally charged to expense during the financial period in which they are incurred. However, major renovations are capitalized and included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group. Major renovations are depreciated over the remaining useful life of the related asset.

Gains and losses on the disposal of fixed assets are included in operating profit/loss.

Leases

The Group has entered into various operating leases the payments under which are treated as rentals and charged to the profit and loss account on a straight-line basis over the lease terms.

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined on a first in first out (FIFO) basis. Net realizable value is the amount that can be realized from the sale of the inventory in the normal course of business after allowing for the costs of realization.

In addition to the cost of materials and direct labor, an appropriate proportion of production overheads is included in the inventory values.

Cash and cash equivalents

The Group manages its short-term liquidity through holdings of cash and highly liquid interest-bearing securities (included as current available-for-sale investments in the balance sheet). For the purposes of the cash flow statement, these are shown together as cash and cash equivalents.

Accounts receivable

Accounts receivable are carried at the original invoice amount to customers less an estimate made for doubtful receivables based on a periodic review of all outstanding amounts. Bad debts are written off when identified.

Borrowings

Borrowings are classified as originated loans and are recognized initially at an amount equal to the proceeds received, net of transaction costs incurred. In subsequent periods, they are stated at amortized cost using the effective yield method; any difference between proceeds (net of transaction costs) and the redemption value is recognized in the profit and loss account over the period of the borrowings.

Loans to customers

Loans to customers are recorded at amortized cost. Loans are subject to regular and thorough review as to their collectibility and as to available collateral; in the event that any loan is deemed not fully recoverable, provision is made to reflect the shortfall between the carrying amount and the present value of the expected cash flows. Interest income on loans to customers is included within other operating income.

Income taxes

Current taxes are based on the results of the Group companies and are calculated according to local tax rules.

Deferred tax assets and liabilities are determined, using the liability method, for all temporary differences arising between the tax basis of assets and liabilities and their carrying values for financial reporting purposes. Currently-enacted tax rates are used in the determination of deferred income tax.

Under this method the Group is required, in relation to an acquisition, to make provision for deferred taxes on the difference between the fair values of the net assets acquired and their tax bases.

Notes to the Consolidated Financial Statements (Continued)

1. Accounting principles (Continued)

The principal temporary differences arise from intercompany profit in inventory, depreciation on property, plant and equipment, untaxed reserves and tax losses carried forward. Deferred tax assets relating to the carryforward of unused tax losses are recognized to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilized.

Stock options

Stock options are granted to employees. The options are granted with a fixed exercise price set on a date outlined in the plan. When the options are exercised, the proceeds received, net of any transaction costs, are credited to share capital (nominal value) and share premium. Treasury shares are acquired by the Group to meet its obligations under employee stock compensation plans. When treasury shares are issued on exercise of stock options any gain or loss is recognized in share issue premium.

Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, the reimbursement would be recognized as an asset but only when the reimbursement is virtually certain.

The Group recognizes the estimated liability to repair or replace products still under warranty at the balance sheet date. The provision is calculated based on historical experience of the level of repairs and replacements.

The Group recognizes a provision for social security costs on unexercised stock options granted to employees at the date options are granted. The provision is measured based on the fair value of the options, and the amount of the provision is adjusted to reflect the changes in the Nokia share price.

Dividends

Dividends proposed by the Board of Directors are not recorded in the financial statements until they have been approved by the shareholders at the Annual General Meeting.

Earnings per share

The Group calculates both basic and diluted earnings per share in accordance with IAS 33, Earnings per share. Under IAS 33, basic earnings per share is computed using the weighted average number of shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of shares outstanding during the period plus the dilutive effect of warrants and stock options outstanding during the period.

2. Segment information

Nokia is organized on a worldwide basis into three primary business segments: Nokia Networks, Nokia Mobile Phones and Nokia Ventures Organization. Nokia's reportable segments are strategic

Notes to the Consolidated Financial Statements (Continued)

2. Segment information (Continued)

business units that offer different products and services for which monthly financial information is provided to the Board.

Nokia Networks is a leading provider of mobile, fixed broadband and IP network infrastructure and related services. Nokia Networks aims to be a leader in IP mobility core, radio and broadband access for network providers and operators.

Nokia Mobile Phones develops, manufactures and supplies mobile phones and wireless data products, including a complete range of cellular phones for all major digital and analog standards worldwide.

Nokia Ventures Organization exists to create new businesses outside the natural development path of the company's core activities. The unit comprises venture capital activities, incubation, and a portfolio of new ventures, including two more mature businesses: Nokia Internet Communications and Nokia Home Communications.

Common Group Functions consists of common research and general Group functions.

The accounting policies of the segments are the same as those described in Note 1. Nokia accounts for intersegment revenues and transfers as if the revenues or transfers were to third parties, that is, at current market prices. Nokia evaluates the performance of its segments and allocates resources to them based on operating profit.

Notes to the Consolidated Financial Statements (Continued)

2. Segment information (Continued)

No single customer represents 10% or more of Group revenues.

	Nokia Networks	Nokia Mobile Phones	Nokia Ventures Organization	Common Group Functions	Total reportable segments	Eliminations	Group
	EURm	EURm	EURm	EURm	EURm	EURm	EURm
2001							
Profit and Loss Information							
Net sales to external customers	7,521	23,107	563	—	31,191		31,191
Net sales to other segments . . .	13	51	22	—	86	(86)	—
Depreciation and amortization .	511	642	115	162	1,430		1,430
Impairment and customer finance charges	925	—	307	80	1,312		1,312
Operating profit	(73)	4,521	(855)	(231)	3,362		3,362
Share of results of associated companies	—	—	—	(12)	(12)		(12)
Balance Sheet Information							
Capital expenditure ⁽¹⁾	288	377	23	353	1,041		1,041
Segment assets ⁽²⁾	5,469	6,087	260	1,104	12,920	968	13,888
of which:							
Investments in associated companies	—	—	—	49	49		49
Unallocated assets ⁽³⁾							8,539
Total assets							<u>22,427</u>
Segment liabilities ⁽⁴⁾	2,084	4,867	283	258	7,492	(132)	7,360
Unallocated liabilities ⁽⁵⁾							<u>2,666</u>
Total liabilities							<u>10,026</u>

Notes to the Consolidated Financial Statements (Continued)

2. Segment information (Continued)

	Nokia Networks	Nokia Mobile Phones	Nokia Ventures Organization	Common Group Functions	Total reportable segments	Eliminations	Group
	EURm	EURm	EURm	EURm	EURm	EURm	EURm
2000							
Profit and Loss Information							
Net sales to external customers	7,708	21,844	824	—	30,376		30,376
Net sales to other segments . . .	6	43	30	—	79	(79)	—
Depreciation and amortization .	354	467	102	86	1,009		1,009
Operating profit	1,358	4,879	(387)	(74)	5,776		5,776
Share of results of associated companies	—	—	—	(16)	(16)		(16)
Balance Sheet Information							
Capital expenditure ⁽¹⁾	304	902	38	336	1,580		1,580
Segment assets ⁽²⁾	5,076	7,108	709	1,577	14,470	(688)	13,782
of which:							
Investments in associated companies	—	—	—	61	61		61
Unallocated assets ⁽³⁾							6,108
Total assets							19,890
Segment liabilities ⁽⁴⁾	1,936	4,602	256	686	7,480	(685)	6,795
Unallocated liabilities ⁽⁵⁾							2,110
Total liabilities							8,905
1999							
Profit and Loss Information							
Net sales to external customers	5,670	13,168	409	525	19,772		19,772
Net sales to other segments . . .	3	14	6	55	78	(78)	—
Depreciation and amortization .	286	300	44	35	665		665
Operating profit	1,082	3,099	(175)	(98)	3,908		3,908
Share of result of associated companies	—	(3)	—	(2)	(5)		(5)

⁽¹⁾ Including goodwill and capitalized development costs, capital expenditures amount to EUR 2,064 million in 2001 (EUR 2,990 million in 2000). The goodwill and capitalized development costs consist of EUR 801 million in 2001 (EUR 597 million in 2000) for Nokia Networks, EUR 59 million in 2001 (EUR 475 million in 2000) for Nokia Mobile Phones and EUR 163 million in 2001 (EUR 338 million in 2000) for Nokia Ventures Organization.

⁽²⁾ Comprises intangible assets, property, plant and equipment, investments, inventories and accounts receivable as well as prepaid expenses and accrued income except those related to interest and taxes.

⁽³⁾ Unallocated assets including prepaid expenses and accrued income related to taxes and deferred tax assets (EUR 1,106 million in 2001 and EUR 565 million in 2000).

Notes to the Consolidated Financial Statements (Continued)

2. Segment information (Continued)

⁽⁴⁾ Comprises accounts payable, deferred income, accrued expenses and provisions except those related to interest and taxes.

⁽⁵⁾ Unallocated liabilities including prepaid income and accrued expenses related to taxes and deferred tax liabilities (EUR 1,077 million in 2001 and EUR 339 million in 2000).

	2001	2000	1999
	EURm	EURm	EURm
Net sales to external customers by geographic area by location of customer			
Finland	453	494	479
USA	5,614	5,312	3,360
China	3,418	3,065	2,332
Great Britain	2,808	2,828	1,855
Germany	2,003	2,579	1,679
Other	16,895	16,098	10,067
Total	<u>31,191</u>	<u>30,376</u>	<u>19,772</u>
	2001	2000	
	EURm	EURm	
Segment assets by geographic area			
Finland	5,087	4,688	
USA	2,279	2,774	
China	1,668	2,030	
Great Britain	519	654	
Germany	611	909	
Other	3,724	2,727	
Total	<u>13,888</u>	<u>13,782</u>	
	2001	2000	1999
	EURm	EURm	EURm
Capital expenditures by market area			
Finland	477	587	487
USA ⁽¹⁾	151	279	313
China	131	157	121
Great Britain	34	75	54
Germany	37	133	124
Other ⁽¹⁾	211	349	259
Total	<u>1,041</u>	<u>1,580</u>	<u>1,358</u>

⁽¹⁾ Including goodwill and capitalized development costs, capital expenditures amount to EUR 2,064 million in 2001 (EUR 2,990 million in 2000 and EUR 1839 million in 1999). The goodwill and capitalized development costs consist of EUR 582 million in USA in 2001 (EUR 567 million in 2000 and EUR 200 million in 1999) and EUR 441 million in other areas in 2001 (EUR 843 million in 2000 and EUR 281 million in 1999).

Notes to the Consolidated Financial Statements (Continued)

3. Percentage of completion

Contract sales recognized under the percentage of completion method were approximately EUR 6.7 billion in 2001 (EUR 6.7 billion in 2000 and EUR 5.1 billion in 1999). Payments received in advance of contract revenues were EUR 146 million at December 31, 2001 (EUR 97 million in 2000 and EUR 133 million in 1999). Contract revenues recorded prior to billings were not significant.

Revenue recognition on initial third generation network contracts begins upon successful delivery of the first operational phase of the network. Due to the development activities required to reach this milestone, revenue is not considered earned until specified functionality is achieved. Prior to reaching this milestone, costs incurred are recorded as project work in progress. These costs amounted to EUR 258 million at December 31, 2001 (see Note 17).

4. Personnel expenses

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Wages and salaries	2,388	2,378	1,946
Pension expenses, net	193	54	127
Other social expenses	524	456	310
Personnel expenses as per profit and loss account	<u>3,105</u>	<u>2,888</u>	<u>2,383</u>

Pension expenses comprise EUR 196 million in 2001 (EUR 93 million in 2000 and EUR 127 million in 1999) in respect of multi-employer, insured and defined contribution plans.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Remuneration of the Chairman and the other members of the Boards of Directors, Group Executive Board and Presidents and Managing Directors* .	16	17	15
* Incentives included in remuneration	2	4	3

Pension commitments for the management:

The retirement age of the management of the Group companies is between 60-65 years.

For the Chief Executive Officer and the President of the Parent Company the retirement age is 60 years.

5. Pensions

The most significant pension plans are in Finland and are comprised of the Finnish state TEL system with benefits directly linked to employee earnings. These benefits are financed in two distinct portions. The majority of benefits are financed by contributions to a central pool with the majority of the contributions being used to pay current benefits. The other part comprises reserved benefits which are pre-funded through the trustee-administered Nokia Pension Foundation. The pooled portion of the TEL system is accounted for as a defined contribution plan and the reserved portion as a defined benefit plan. The foreign plans include both defined contribution and defined benefit plans.

Notes to the Consolidated Financial Statements (Continued)

5. Pensions (Continued)

The amounts recognized in the balance sheet relating to single employer defined benefit schemes are as follows:

	2001		2000	
	Domestic plans	Foreign plans	Domestic plans	Foreign plans
	EURm	EURm	EURm	EURm
Fair value of plan assets	664	123	921	116
Present value of funded obligations	(530)	(236)	(453)	(194)
Surplus/(Deficit)	134	(113)	468	(78)
Unrecognized net actuarial (gains)/losses	4	48	(347)	12
Prepaid/(Accrued) pension cost in balance sheet	138	(65)	121	(66)

The amounts recognized in the profit and loss account are as follows:

	2001 EURm	2000 EURm
Current service cost	49	40
Interest cost	40	36
Expected return on plan assets	(75)	(78)
Net actuarial (gains) recognized in year	(16)	(24)
Curtailment	(1)	—
Total, included in personnel expenses	(3)	(26)

Movements in prepaid pension costs recognized in the balance sheet are as follows:

	2001 EURm	2000 EURm
Prepaid pension costs at beginning of year	55	13
Net income recognized in the profit and loss account	3	26
Contributions paid	15	16
Prepaid pension costs at end of year	73*	55

* included within prepaid expenses and accrued income

The principal actuarial weighted average assumptions used were as follows:

	2001		2000	
	Domestic	Foreign	Domestic	Foreign
	%	%	%	%
Discount rate for determining present values	5.80	5.85	5.80	6.10
Expected long-term rate of return on plan assets	7.50	6.49	7.25	6.60
Annual rate of increase in future compensation levels	4.00	3.05	4.00	3.10

The domestic pension plan assets include Nokia securities with fair values of EUR 332 million in 2001 (EUR 577 million in 2000).

The actual return on plan assets was EUR (253) million in 2001 (EUR (76) million in 2000).

Notes to the Consolidated Financial Statements (Continued)

6. Selling and marketing expenses, administration expenses and other operating income and expenses

	2001	2000	1999
	EURm	EURm	EURm
Selling and marketing expenses	(2,363)	(2,103)	(1,220)
Administration expenses	(737)	(754)	(759)
Other operating expenses	(525)	(225)	(163)
Other operating income	182	278	331
Total	<u>(3,443)</u>	<u>(2,804)</u>	<u>(1,811)</u>

Other operating expenses for 2001 include non-recurring restructuring charges of EUR 166 million (see Note 7).

Other operating income and expenses for 2000 are composed of various items which are individually insignificant. Other operating income for 2000 includes a pension credit of EUR 55 million relating to a change in accounting method for the Finnish pension plans.

Other operating income for 1999 includes gains from the divestments of Salcomp Oy and the SDH/DWDM transport equipment business (EUR 80 million and EUR 56 million, respectively). Other operating expenses for 1999 include a charge of EUR 70 million related to exit from the display business.

The Group expenses advertising and promotion costs as incurred. Advertising and promotional expenses were EUR 849 million in 2001 (EUR 853 million in 2000 and EUR 537 million in 1999).

7. Impairment and restructuring

2001	Nokia Networks	Nokia Mobile Phones	Nokia Ventures Organization	Common expenses	Group
	EURm	EURm	EURm	EURm	EURm
Impairment of goodwill	211	—	307	—	518
Impairment of minority investments	—	—	6	74	80
One-time customer finance charges	714	—	—	—	714
	<u>925</u>	<u>—</u>	<u>313</u>	<u>74</u>	<u>1,312</u>
Restructuring expenses, net, included in					
Cost of sales	75	16	4	—	95
Operating expenses	41	19	106	—	166
	<u>116</u>	<u>35</u>	<u>110</u>	<u>—</u>	<u>261</u>
Total	<u>1,041</u>	<u>35</u>	<u>423</u>	<u>74</u>	<u>1,573</u>

The goodwill impairment relates to Nokia Networks Broadband business and Nokia Internet Communication, part of Nokia Ventures Organization. The impairment was calculated by comparing the discounted cash flows of the relevant business to the carrying value of goodwill for that business. The impairments were recorded in connection with the restructuring of these businesses.

Notes to the Consolidated Financial Statements (Continued)

7. Impairment and restructuring (Continued)

During 2001 the company's investment in certain equity securities suffered a permanent decline in value.

During 2001, Nokia made an one-time charge of EUR 714 million to cover Nokia Networks' customer loans by EUR 669 million related to a defaulted financing to Telsim, a GSM operator in Turkey, and EUR 45 million relating to the insolvency of Dolphin in the UK. With these additional amounts Nokia has now covered its total exposure to Telsim and Dolphin. Nokia continues to pursue the recovery of all amounts due from these customers.

The amount charged to income in 2001 for restructuring expenses relates primarily to inventory write-offs, redundancy and personnel costs and operating lease costs for surplus space. Virtually all of these costs were incurred in 2001.

8. Acquisitions

In August 2001 Nokia acquired Amber Networks, a networking infrastructure company, for EUR 408 million, which was paid in Nokia stock and Nokia stock options. The fair value of net assets acquired was EUR (13) million giving rise to goodwill of EUR 421 million.

In January 2001 Nokia acquired in a cash tender offer Ramp Networks, a provider of purpose built Internet security appliances, for EUR 147 million. The fair value of net assets acquired was EUR (16) million giving rise to goodwill of EUR 163 million.

In October 2000 Nokia increased its ownership of the Brazilian handset manufacturing joint venture NG Industrial (NGI) from 51% to 100% by acquiring all the shares of NGI held by Gradiente Telecom S.A. for EUR 492 million in cash. The fair value of net assets acquired was EUR 43 million giving rise to goodwill of EUR 449 million.

In August 2000 Nokia acquired DiscoveryCom, a company which provides solutions that enable communications service providers to rapidly install and maintain Broadband Digital Subscriber Line (DSL) services for fast Internet access. The acquisition price was EUR 223 million, which was paid in Nokia stock and Nokia stock options. The fair value of net assets acquired was EUR (4) million giving rise to goodwill of EUR 227 million.

In March 2000 Nokia acquired Network Alchemy, a provider of IP Clustering solutions for EUR 336 million, which was paid in Nokia stock and Nokia stock options. The fair value of net assets acquired was EUR (2) million giving rise to goodwill of EUR 338 million.

In October 1999 Nokia acquired Telekol Corporation, a company specializing in intelligent corporate communications solutions, for EUR 45 million in cash. The fair value of net assets acquired was EUR 2 million giving rise to a goodwill of EUR 43 million.

In September 1999 Nokia strengthened its capabilities in IP wireless bypass technology with an agreement to acquire Rooftop Communications Corporation for EUR 48 million, of which EUR 42 million was paid in Nokia stock and EUR 6 million was paid in cash. The fair value of net assets acquired was EUR 0.2 million giving rise to a goodwill of EUR 47.8 million.

In February 1999 Nokia acquired Diamond Lane Communications for EUR 112 million in cash. The fair value of net assets acquired was EUR 5 million giving rise to a goodwill of EUR 107 million.

Notes to the Consolidated Financial Statements (Continued)

9. Depreciation and amortization

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Depreciation and amortization by asset category			
Intangible assets			
Capitalized development costs	169	118	110
Intangible rights	65	50	34
Goodwill	302	140	71
Other intangible assets	34	29	19
Property, plant and equipment			
Buildings and constructions	31	27	18
Machinery and equipment	811	615	405
Other tangible assets	18	30	8
Total	<u>1,430</u>	<u>1,009</u>	<u>665</u>
Depreciation and amortization by function			
Cost of sales	367	298	201
R&D	427	244	241
Selling, marketing and administration	264	230	101
Other operating expenses	70	97	51
Goodwill	302	140	71
Total	<u>1,430</u>	<u>1,009</u>	<u>665</u>

10. Financial income and expenses

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Income from available-for-sale investments			
Dividend income	27	70	6
Interest income	215	212	196
Other financial income	24	17	5
Exchange gains and losses	(25)	(1)	(5)
Interest expenses	(82)	(115)	(254)
Other financial expenses	(34)	(81)	(6)
Total	<u>125</u>	<u>102</u>	<u>(58)</u>

Notes to the Consolidated Financial Statements (Continued)

11. Income taxes

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Current tax	(1,542)	(1,852)	(1,250)
Deferred tax	350	68	61
Total	<u>(1,192)</u>	<u>(1,784)</u>	<u>(1,189)</u>
Finland	(877)	(1,173)	(740)
Other countries	(315)	(611)	(449)
Total	<u>(1,192)</u>	<u>(1,784)</u>	<u>(1,189)</u>

The differences between income tax expense computed at statutory rates (29% in Finland in 2001 and 2000 and 28% in 1999) and income tax expense provided on earnings are as follows at December 31:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	EURm	EURm	EURm
Income tax expense at statutory rate	1,011	1,689	1,078
Deduction for write-down of investments in subsidiaries	(37)	(28)	—
Amortization of goodwill	87	40	17
Impairment of goodwill	197	—	—
Provisions without income tax benefit/expense	5	53	35
Taxes for prior years	23	53	8
Taxes on foreign subsidiaries' net income in excess of income taxes at statutory rates	(106)	(29)	32
Operating losses with no current tax benefit	16	25	22
Group adjustments	—	—	(4)
Other	(4)	(19)	1
Income tax expense	<u>1,192</u>	<u>1,784</u>	<u>1,189</u>

At December 31, 2001 the Group had loss carryforwards, primarily attributable to foreign subsidiaries of EUR 75 million (EUR 109 million in 2000 and EUR 140 million in 1999), most of which will expire between 2002 and 2006.

Certain of the Group companies' income tax returns for periods ranging from 1996 through 1999 are under examination by tax authorities. The Group does not believe that any significant additional taxes in excess of those already provided for will arise as a result of the examinations.

Notes to the Consolidated Financial Statements (Continued)

12. Intangible assets

	<u>2001</u>	<u>2000</u>
	EURm	EURm
Capitalized development costs		
Acquisition cost January 1	1,097	811
Additions	431	394
Disposals	(214)	(108)
Accumulated amortization December 31	(421)	(457)
Net carrying amount December 31	<u>893</u>	<u>640</u>
Goodwill		
Acquisition cost January 1	1,570	554
Additions	592	1,016
Disposals	(43)	—
Impairment charges	(518)	—
Accumulated amortization December 31	(747)	(458)
Net carrying amount December 31	<u>854</u>	<u>1,112</u>
Intangible rights		
Acquisition cost January 1	245	187
Additions	73	77
Disposals	(18)	(19)
Accumulated amortization December 31	(187)	(134)
Net carrying amount December 31	<u>113</u>	<u>111</u>
Other intangible assets		
Acquisition cost January 1	214	164
Additions	38	55
Disposals	(15)	(12)
Translation differences	(4)	7
Accumulated amortization December 31	(109)	(83)
Net carrying amount December 31	<u>124</u>	<u>131</u>

Notes to the Consolidated Financial Statements (Continued)

13. Property, plant and equipment

	2001 EURm	2000 EURm
Land and water areas		
Acquisition cost January 1	143	111
Additions	14	33
Disposals	(11)	(3)
Translation differences	(1)	2
Net carrying amount December 31	<u>145</u>	<u>143</u>
Buildings and constructions		
Acquisition cost January 1	739	540
Additions	190	224
Disposals	(6)	(39)
Translation differences	(5)	14
Accumulated depreciation December 31	<u>(147)</u>	<u>(117)</u>
Net carrying amount December 31	<u>771</u>	<u>622</u>
Machinery and equipment		
Acquisition cost January 1	3,343	2,382
Additions	780	1,089
Disposals	(470)	(178)
Translation differences	(27)	50
Accumulated depreciation December 31	<u>(2,194)</u>	<u>(1,718)</u>
Net carrying amount December 31	<u>1,432</u>	<u>1,625</u>
Other tangible assets		
Acquisition cost January 1	74	53
Additions	45	34
Disposals	(37)	(15)
Translation differences	(3)	2
Accumulated depreciation December 31	<u>(50)</u>	<u>(46)</u>
Net carrying amount December 31	<u>29</u>	<u>28</u>
Advance payments and fixed assets under construction		
Acquisition cost January 1	314	301
Additions	152	230
Disposals	(73)	(62)
Transfers		
Other intangible assets	(3)	—
Land and water areas	(4)	(4)
Buildings and constructions	(84)	(76)
Machinery and equipment	(160)	(91)
Translation differences	<u>(5)</u>	<u>16</u>
Net carrying amount December 31	<u>137</u>	<u>314</u>

Notes to the Consolidated Financial Statements (Continued)

14. Investments in associated companies

	<u>2001</u>	<u>2000</u>
	EURm	EURm
Acquisition cost January 1	61	76
Additions	7	6
Write-downs	(6)	—
Share of results	(12)	(16)
Translation differences	(1)	(5)
Net carrying amount December 31	<u>49</u>	<u>61</u>

Shareholdings in associated companies include listed investments of EUR 6 million (EUR 7 million in 2000).

At the balance sheet date, the fair value of these investments, based on quoted market prices, was EUR 19 million (EUR 45 million in 2000)

15. Available-for-sale investments

	<u>2001</u>
	EURm
At January 1 as originally stated (cost)	3,111
On adoption of IAS 39 at January 1 remeasurement to fair value	58
Fair value at January 1	3,169
Additions, net	1,581
Impairment losses	(80)
Fair value at December 31	<u>4,670</u>
Non-current	399
Current	4,271

On the adoption of IAS 39 at January 1, 2001, all investment securities classified as available-for-sale were remeasured to fair value. The difference between their original carrying amount and their fair value at January 1, 2001 was credited to fair value and other reserves (see Consolidated Statement of Changes in Shareholders' Equity). Gains and losses arising from the change in the fair value of available-for-sale investments since that date are recognized directly in this reserve.

Available-for-sale investments, comprising marketable debt and equity securities and investments in unlisted equity shares, are fair valued, except in the case of certain unlisted equities held within Nokia Venture Funds. These investments are in immature companies, the fair values of which cannot be measured reliably. Such equities are carried at cost (EUR 153 million in 2001), less impairment. For investments traded in active markets (EUR 169 million in 2001 and EUR 140 million in 2000), fair value is determined by reference to exchange quoted bid prices. For other investments, fair value is estimated by reference to the current market value of similar instruments or by reference to the discounted cash flows of the underlying net assets.

Available-for-sale investments are classified as non-current, except for highly liquid, interest-bearing investments held as part of the Group's on going cash management activities and which are regarded as cash equivalents. See Note 34 for details of these investments.

Notes to the Consolidated Financial Statements (Continued)

16. Long-term loans receivable

These comprise loans made to customers principally to support their financing of network infrastructure, and, excluding loans which are fully written down (see Note 7), are repayable as follows:

	<u>2001</u>	<u>2000</u>
	<u>EURm</u>	<u>EURm</u>
Under 1 year	—	—
Between 1 and 2 years	656	—
Between 2 and 5 years	341	867
Over 5 years	144	—
Less: Provisions	<u>(13)</u>	<u>(59)</u>
	<u><u>1,128</u></u>	<u><u>808</u></u>

17. Inventories

	<u>2001</u>	<u>2000</u>
	<u>EURm</u>	<u>EURm</u>
Raw materials, supplies and other	741	1,057
Work in progress	582	685
Finished goods	465	521
Total	<u><u>1,788</u></u>	<u><u>2,263</u></u>

Included within inventories at December 31, 2001 is EUR 258 million relating to work in progress on 3G contracts.

18. Receivables

Prepaid expenses and accrued income mainly consist of VAT receivables and other accruals.

Accounts receivable include EUR 25 million (EUR 16 million in 2000) due more than 12 months after the balance sheet date.

Notes to the Consolidated Financial Statements (Continued)

19. Valuation and qualifying accounts

Provisions on assets to which they apply:	Balance at beginning of year	Charged to cost and expenses	Charged to other accounts	Deductions	Balance at end of year
	EURm	EURm	EURm	EURm	EURm
2001					
Provision for bad and doubtful debts	236	108	—	(127)	217
Long-term loans receivable provision	59	—	—	(46)	13
Inventory obsolescence provision	263	334	—	(283)	314
Deferred tax valuation allowance	16	—	(8)	—	8
2000					
Provision for bad and doubtful debts	87	203	—	(54)	236
Long-term loans receivable provision	—	59	—	—	59
Inventory obsolescence provision	168	457	—	(362)	263
Deferred tax valuation allowance	37	—	(21)	—	16
1999					
Provision for bad and doubtful debts	66	43	—	(22)	87
Inventory obsolescence provision	144	186	—	(162)	168
Deferred tax valuation allowance	47	—	(10)	—	37

20. Fair value and other reserves

The Group adopted IAS 39 at January 1, 2001; the impact on shareholders' equity and on various balance sheet captions at January 1, 2001 is shown below. In accordance with IAS 39, the comparative financial statements for the year ended December 31, 2000 are not restated.

In accordance with the transitional requirements of IAS 39, the Group transferred a net loss of EUR 114 million to the hedging reserve in respect of outstanding foreign exchange forward contracts that were properly designated and highly effective as cash flow hedges of highly probable forecast foreign currency cash flows. Previously such gains and losses were reported as deferred income or expenses in the balance sheet.

Notes to the Consolidated Financial Statements (Continued)

20. Fair value and other reserves (Continued)

Summary of impact of adopting IAS 39 at January 1, 2001:

	<u>Hedging reserve</u> EURm	<u>Available-for-sale investments</u> EURm	<u>Total</u> EURm
Year ended December 31, 2000:			
Balance at January 1, 2001	—	—	—
Effect of adopting IAS 39:			
Fair valuation of available-for-sale securities	—	58	58
Transfer of gains and losses on qualifying cash flow hedging derivatives	(114)	—	(114)
Balance at January 1, 2001, restated	(114)	58	(56)
Year ended December 31, 2001:			
Balance at January 1, 2001, restated	(114)	58	(56)
Cash flow hedges:			
Fair value gains in period	76	—	76
Available-for-sale investments:			
Net fair value losses	—	(67)	(67)
Transfer to profit and loss account on impairment	—	74	74
Transfer to profit and loss account on disposal	—	(7)	(7)
Balance at December 31, 2001	<u>(38)</u>	<u>58</u>	<u>20</u>

In order to ensure that amounts deferred in the cash flow hedging reserve represent only the effective portion of gains and losses on properly designated hedges of future transactions that remain highly probable at the balance sheet date, Nokia has adopted a process under which all derivative gains and losses are initially recognized in the profit and loss account. The appropriate reserve balance is calculated at the end of each period and posted to equity.

Nokia continuously reviews the underlying and the hedges allocated thereto, to ensure that the amounts transferred to the Hedging Reserve during the year ended December 31, 2001 do not include gains/losses of forward exchange contracts that have been designated to hedge forecasted sales or purchases that are no longer expected to occur. Because of the number of transactions undertaken during each period and the process used to calculate the reserve balance, separate disclosure of the transfers of gains and losses to and from the reserve would be impractical.

All of the net fair value gains or losses at December 31, 2001 on open forward foreign exchange contracts which hedge anticipated future foreign currency sales or purchases will be transferred from the Hedging Reserve to the profit and loss account when the forecasted foreign currency cash flows occur, at various dates up to 1 year from the balance sheet date.

See Note 15 for impact of adopting IAS 39 on available-for-sale investments at January 1, 2001.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company

Nokia shares

Nokia has one class of shares. Each Nokia share entitles the holder to one (1) vote at General Meetings of Nokia⁽¹⁾. With effect from April 10, 2000, the par value of the share is EUR 0.06.

The minimum share capital stipulated in the Articles of Association is EUR 170 million and the maximum share capital EUR 680 million. The share capital may be increased or reduced within these limits without amending the Articles of Association. On December 31, 2001 the share capital of Nokia Corporation was EUR 284,251,807 and the total number of shares and votes was 4,737,530,121. On December 31, 2001 the total number of shares included 1,227,752 shares owned by the Group companies with an aggregate par value of EUR 73,665 representing approximately 0.03 per cent of the total number of shares and votes.

Share capital and shares, December 31⁽²⁾

	2001	2000	1999	1998	1997
Share capital, EURm					
K (common)	(1)	(1)	(1)	54	66
A (preferred)				201	186
Total (EURm)	284	282	279	255	252
Shares (1,000, par value EUR 0.06)					
K (common)	(1)	(1)	(1)	1,016,246	1,259,000
A (preferred)				3,828,527	3,538,634
Total (1,000)	4,737,530	4,696,213	4,654,064	4,844,773	4,797,634
Shares owned by the Group at					
year-end (1,000)	1,228	4,080	1,385	257,288	257,288
Number of shares excluding shares					
owned by the Group at year-end					
(1,000)	4,736,302	4,692,133	4,652,679	4,587,485	4,540,346
Average number of shares excluding					
shares owned by the Group during					
the year (1,000), (basic)	4,702,852	4,673,162	4,593,761	4,553,364	4,532,512
Average number of shares excluding					
shares owned by the Group during					
the year (1,000), diluted	4,787,219	4,792,980	4,743,184	4,693,204	4,612,664
Number of registered shareholders ⁽³⁾ .	116,352	94,500	48,771	30,339	28,596

⁽¹⁾ Nokia used to have two classes of shares, A shares and K shares, until the two classes of shares were consolidated with effect since April 9, 1999. The Annual General Meeting held on March 21, 2001 resolved to remove the provision regarding the right to a fixed annual dividend attached to the shares. The resolution was effective as of April 17, 2001. The previous class K shares entitled to ten (10) votes at General Meetings, but to no fixed annual dividend.

⁽²⁾ Figures have been recalculated to reflect the par value of EUR 0.06 of the share.

⁽³⁾ Each account operator is included in the figure as only one registered shareholder.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

Splits of the par value of the Nokia share

	Par value before	Split ratio	Par value after	Effective date
1986	FIM 100 (EUR 16.82)	5:1	FIM 20 (EUR 3.36)	December 31, 1986
1995	FIM 20 (EUR 3.36)	4:1	FIM 5 (EUR 0.84)	April 24, 1995
1998	FIM 5 (EUR 0.84)	2:1	FIM 2.5 (EUR 0.42)	April 16, 1998
1999	FIM 2.5 (EUR 0.42)	2:1	EUR 0.24 ⁽⁴⁾	April 12, 1999
2000	EUR 0.24	4:1	EUR 0.06	April 10, 2000

Share issues and bonus issues 1997-2001⁽⁵⁾

Type of Issue	Subscription Date	Subscription price or amount of bonus issue	Number of new shares	Date of payment	Net proceeds	New share capital
		EUR	(1,000)		EURm	EURm
Nokia Stock Option Plan 1994.....	1998	0.98	268	1998	0.26	0.01
	1999	0.98	12,238	1999	12.03	0.73
Nokia Stock Option Plan 1995.....	1997	1.77	2,326	1997	4.11	0.12
	1998	1.77	30,304	1998	53.52	1.59
	1999	1.77	18,602	1999	32.85	1.12
	2000	1.77	22,011	2000	38.87	1.32
	2001	1.77	1,682	2001	2.97	0.10
Nokia Stock Option Plan 1997.....	1997	3.23	2,508	1997	8.09	0.13
	1998	3.23	16,566	1998	53.46	0.87
	1999	3.23	33,456	1999	107.97	2.01
	2000	3.23	10,117	2000	32.65	0.61
	2001	3.23	20,993	2001	67.81	1.26
Nokia Stock Option Plan 1999.....	2001	16.89	382	2001	6.46	0.02
Bonus issue	1999	0.0075	—	1999	—	36.05
Share issue to Stockholders of Rooftop Communications Corporation	1999	20.04	2,118	1999	42.45	0.13
Share issue to stockholders of Network Alchemy, Inc.	2000	49.91	6,112	2000	305.06	0.37

⁽⁴⁾ A bonus issue of EUR 0.03 per each share of a par value of EUR 0.24 in the same connection.

⁽⁵⁾ Prices and numbers of shares have been recalculated to reflect the par value of EUR 0.06 of the share.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

Type of Issue	Subscription Date	Subscription price or amount of bonus issue EUR	Number of new shares (1,000)	Date of payment	Net proceeds EURm	New share capital EURm
Share issue to stockholders of DiscoveryCom, Inc.	2000	45.98	3,909	2000	179.75	0.23
Share issue to stockholders of Amber Networks, Inc.	2001	20.77*	18,329	2001	380.72	1.1

* Subscription price at the Parent Company

Reductions of share capital

Type of reduction	Year	Number of shares affected (1,000, par value EUR 0.06)	Amount of reduction of the share capital EURm	Amount of reduction of the restricted capital EURm	Amount of reduction of the retained earnings EURm
Cancellation of shares	1999	257,123	15.43	—	3,435.27
Cancellation of shares	2001	69	0.004	—	—

Authorizations of the Board of Directors

The Board of Directors had been authorized by Nokia shareholders at the Annual General Meeting held on March 22, 2000 to decide on an increase of the share capital by a maximum of EUR 28,800,000 offering a maximum of 480,000,000 new shares (split adjusted). In 2001, the Board of Directors has not increased the share capital on the basis of this authorization. The authorization expired on March 21, 2001.

At the Annual General Meeting held on March 21, 2001 Nokia shareholders authorized the Board of Directors to decide on an increase of the share capital by a maximum of EUR 54,000,000 in one or more issues offering a maximum of 900,000,000 new shares with a par value of 6 cents within one year as of the resolution of the Annual General Meeting. The share capital may be increased in deviation from the shareholders' pre-emptive rights for share subscription provided that important financial grounds exist such as to finance possible business acquisitions or corresponding arrangements and to grant personnel incentives. In 2001 the Board of Directors has increased the share capital on the basis of the authorization by an aggregate EUR 1,099,753 consisting of 18,329,212 shares, as a result of which the unused authorization amounted to EUR 52,900,247 corresponding to 881,670,788 shares on December 31, 2001. The authorization is effective until March 21, 2002.

At the end of 2001, the Board of Directors had no other authorizations to issue shares, convertible bonds, warrants or stock options.

At the Annual General Meeting held on March 21, 2001 Nokia shareholders authorized the Board of Directors to repurchase a maximum of 225 million Nokia shares, representing 4.75 per cent of total shares outstanding, and to resolve on the disposal of such shares. No shares were repurchased or disposed of in 2001 under the authorizations. These authorizations are effective until March 21,

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

2002. The authorization to dispose of the shares may be carried out pursuant to terms determined by the Board provided that important financial grounds exist such as to finance acquisitions or to grant personnel incentives.

Nokia stock option plans⁽⁶⁾

Stock Option Plan 1995

In 1995 non-interest bearing bonds with warrants with an aggregate principal amount of FIM 1,450,000 and carrying A and B warrants were issued to the management of the Nokia Group (Nokia Stock Option Plan 1995). The bonds were fully repaid by December 31, 2000. By termination of Nokia Stock Option Plan 1995 on January 31, 2001, a total of 74,924,800 shares had been subscribed for and the share capital had been increased by a total of EUR 4,495,488. The listing of B warrants on the Helsinki Exchanges terminated on January 24, 2001. Nokia Stock Option Plan 1995 covered approximately 350 persons.

Nokia Stock Option Plan 1997

In 1997 up to 4,750 non-interest bearing bonds with warrants were issued for up to an aggregate principal amount of FIM 2,375,000 to key personnel of the Nokia Group (Nokia Stock Option Plan 1997). The bonds were fully repaid by December 31, 2000. Each bond carries 500 A warrants, 500 B warrants and 1,000 C warrants. Each warrant confers the right to subscribe for sixteen shares at an aggregate subscription price of EUR 51.63. The A warrants may be exercised from December 1, 1997 through January 31, 2003, the B warrants from November 1, 1999 through January 31, 2003 and the C warrants from November 1, 2001 through January 31, 2003. If exercised in full, the warrants would be exercisable for a total of 152,000,000 shares whereby the share capital would be increased by a maximum amount of EUR 9,120,000 representing approximately 3.21 per cent of the outstanding share capital of Nokia. The A and B warrants are listed on the Helsinki Exchanges as one security as of November 1, 1999 and the C warrants were included in the listing as of November 1, 2001. Nokia Stock Option Plan 1997 covers approximately 2,000 persons.

Nokia Stock Option Plan 1999

In 1999 up to 36,000,000 stock options were issued to key personnel of the Nokia Group (Nokia Stock Option Plan 1999). Of these stock options 12,000,000 have been designated as A, 12,000,000 as B, and 12,000,000 as C. Each stock option confers the right to subscribe for four shares with the aggregate subscription price of EUR 67.55 (A option), EUR 225.12 (B option) and EUR 116.48 (C option). The A options may be exercised from April 1, 2001 through December 31, 2004, the B options from April 1, 2002 through December 31, 2004, and the C options from April 1, 2003 through December 31, 2004. If exercised in full, the stock options will be exercisable for a total of 144,000,000 shares whereby the share capital would be increased by a maximum amount of EUR 8,640,000 representing approximately 3.04 per cent of the outstanding share capital of Nokia. Nokia Stock Option Plan 1999 covers more than 16,000 persons. The A options have been listed on the Helsinki Exchanges as of April 2, 2001.

⁽⁶⁾ Figures have been recalculated to reflect the par value of EUR 0.06 of the share.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

Nokia Stock Option Plan 2001

The Annual General Meeting held on March 21, 2001 approved the issue of 145,000,000 stock options to the key personnel of the Nokia Group (Nokia Stock Option Plan 2001). Each stock option confers the right to subscribe for one share. Of these stock options 12,500,000 have been designated as "2001A," 37,500,000 as "2001B," 14,500,000 as "2002A," 43,500,000 as "2002B," and 37,000,000 as "2001C." The 2001B and 2002B stock options are each divided into twelve sub-categories of equal size. The 2001C stock options, which have been granted to participants during the third or fourth calendar quarter of 2001 form sub-categories and are marked with 2001C 3Q/01 and 2001C 4Q/01, respectively. The share subscription price of the 2001A and 2001B stock options is EUR 36.75. The subscription price per share of 2002A and 2002B stock options is the trade volume weighted average price of the share on the Helsinki Exchanges from May 13 through May 17, 2002. The share subscription price of the 2001C stock options is the trade volume weighted average price of the share on the Helsinki Exchanges during the trading days of the second whole week of the second month (February, May, August or November) of a calendar quarter during which a stock option is granted to a participant. The share subscription price of the 2001C 3Q/01 stock options has been determined to be EUR 20.61 and that of the 2001C 4Q/01 stock options to be EUR 26.67.

2001A stock options may be exercised from July 1, 2002 to December 31, 2006. The share subscription period for each sub-category of the 2001B stock options will commence on a quarterly basis beginning on October 1, 2002 and will terminate on December 31, 2006. The 2002A stock options may be exercised from July 1, 2003 to December 31, 2007. The share subscription period for each sub-category of the 2002B stock options will commence on a quarterly basis beginning on October 1, 2003 and will terminate on December 31, 2007. The share subscription period for the 2001C stock options will commence no earlier than October 1, 2002, and terminates no later than June 30, 2008, as determined by the Board of Directors. The share subscription period for the 2001C 3Q/01 stock options has been determined by the Board of Directors to commence no earlier than October 1, 2002 and to terminate on December 31, 2006. The share subscription period for the 2001C 4Q/01 stock options has been determined by the Board of Directors to commence no earlier than January 1, 2003 and to terminate on December 31, 2006.

If exercised in full, the stock options would be exercisable for a total of 145,000,000 shares whereby the share capital would be increased by a maximum amount of EUR 8,700,000 representing approximately 3.06 per cent of the outstanding share capital of Nokia. Nokia Stock Option Plan 2001 covers more than 25,000 persons.

General

Shares subscribed for pursuant to the warrants and stock options will rank for dividend for the financial year in which the subscription occurs. Other shareholder rights will commence on the date on which the share subscription is entered in the Finnish Trade Register.

Pursuant to the warrants and stock options issued, an aggregate maximum number of 356,796,632 new shares may be subscribed for representing approximately 7.53 per cent of the total number of votes on December 31, 2001. During 2001 the exercise of 1,512,732 warrants attached to the bonds or options resulted in the issuance of 23,057,136 new shares and the increase in the share capital of Nokia of EUR 1,383,428.16.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

There were no other bonds with warrants or stock options and no convertible bonds outstanding during the year 2001, the exercise of which would result in an increase of the share capital of the Parent Company.

The Nokia Holding Inc. 1999 Stock Option Plan

In 1999 Nokia introduced a complementary stock option plan available for Nokia employees in the U.S. and Canada (The Nokia Holding Inc. 1999 Stock Option Plan). Each stock option granted by December 31, 2000 entitles to purchase of one Nokia ADS during certain periods of time after April 1, 2001 until five years from the date of grant, for a price within the range of USD 20.50 - 54.50 per ADS. On December 31, 2001 a total of 896,264 stock options were outstanding and 236,592 were exercisable under the Nokia Holding Inc. 1999 Stock Option Plan. An exercise of the stock options under the Nokia Holding Inc. 1999 Stock Option Plan does not result in increase of the share capital of Nokia Corporation. The maximum number of ADSs with a par value of EUR 0.06 that may be issued under the Plan is 2,000,000. The shares are carried at purchase cost in the balance sheet until disposed.

Information relating to stock warrants and options during 2001, 2000 and 1999 is as follows:

	Number of shares	Weighted average exercise price ⁽¹⁾
		EUR
Shares under option at December 31, 1998	177,631,112	2.72
Granted	92,319,408	15.80
Exercised	64,825,748	2.38
Forfeited	2,171,444	3.42
Shares under option at December 31, 1999	202,953,328	6.89
Granted ⁽²⁾	18,339,647	44.86
Exercised	33,490,088	2.22
Forfeited	2,953,294	24.66
Shares under option at December 31, 2000	184,849,593	19.80
Granted ⁽²⁾	72,644,065	31.78
Exercised	24,790,689	3.54
Forfeited	2,400,770	20.85
Shares under option at December 31, 2001	230,302,199	25.95
Warrants exercisable at December 31, 1999 (shares)	43,046,716	2.50
Warrants exercisable at December 31, 2000 (shares)	12,199,932	3.83
Warrants exercisable at December 31, 2001 (shares)	106,300,988	9.53

⁽¹⁾ Weighted average exercise price, calculated for options where exercise price is known.

⁽²⁾ Includes options converted in acquisitions.

Notes to the Consolidated Financial Statements (Continued)

21. The shares of the Parent Company (Continued)

The options outstanding by range of exercise price at December 31, 2001 are as follows:

Options outstanding				Vested option outstanding	
Exercise prices	Number of shares	Weighted average remaining contractual life in years	Weighted average exercise price	Number of shares	Weighted average exercise price
EUR			EUR		EUR
0.21 - 3.16	1,084,435	6.87	1.02	679,843	1.09
3.23	57,287,040	0.98	3.23	57,285,810	3.23
3.45 - 16.69	1,869,596	8.23	9.00	915,865	9.33
16.89	46,611,515	2.06	16.89	46,135,932	16.89
17.11 - 35.43	38,143,434	2.64	27.43	966,224	24.15
36.75	43,966,902	2.95	36.75	—	—
39.26 - 55.82	497,509	7.75	48.60	209,514	46.38
56.28	40,640,768	1.28	56.28	—	—
56.78 - 62.53	201,000	5.97	59.33	107,800	59.28
	<u>230,302,199</u>			<u>106,300,988</u>	

22. Distributable earnings

	2001
	EURm
Retained earnings	9,536
Translation differences (distributable earnings)	171
Treasury shares	(21)
Other nondistributable items	
Portion of untaxed reserves	(32)
Distributable earnings December 31	<u>9,654</u>

Retained earnings under IAS and Finnish Accounting Standards (FAS) are substantially the same.

Distributable earnings are calculated based on Finnish legislation.

Notes to the Consolidated Financial Statements (Continued)

23. Long-term liabilities

	Outstanding December 31, 2001	Repayment date beyond 5 years	Outstanding December 31, 2000
	EURm	EURm	EURm
Long-term loans are repayable as follows:			
Bonds	90	—	138
Loans from financial institutions	76	—	62
Loans from pension insurance companies	25	15	12
Other long-term finance loans	16	—	8
Other long-term liabilities	76	76	69
	<u>283</u>	<u>91</u>	<u>289</u>
Deferred tax liabilities	177		69
Less current portion	—		(47)
Total long-term liabilities	<u>460</u>		<u>311</u>

The long-term liabilities excluding deferred tax liabilities as of December 31, 2001 mature as follows:

	EURm	
2002	—	—
2003	89	31.4%
2004	103	36.4%
2005	—	—
2006	—	—
Thereafter	91	32.2%
	<u>283</u>	<u>100.0%</u>

The currency mix of the Group long-term liabilities as at December 31, 2001 was as follows:

EUR	GBP	USD	Others
42.18%	22.80%	7.02%	28.00%

The long-term loan portfolio includes a fixed-rate loan with a face amount of GBP 40 million that matures in 2004. The loan is callable by the creditor on a three-month notice basis beginning in 1994, although the Group does not anticipate that the creditor will request repayment prior to the final maturity. Accordingly the loan has not been classified as a current liability at December 31, 2001.

The Group has committed credit facilities totaling USD 2.6 billion and short-term uncommitted facilities. Committed credit facilities are intended to be used for U.S. and Euro Commercial Paper Programs back up purposes. Commitment fees on the facilities vary from 0.06% to 0.10% per annum.

At December 31, 2001, no Group borrowings were collateralized by assets pledged or by mortgages.

Notes to the Consolidated Financial Statements (Continued)

23. Long-term liabilities (Continued)

At December 31, 2001 and 2000 the weighted average interest rate on loans from financial institutions was 6.0% and 7.8%, respectively.

<u>Bonds</u>	<u>Million</u>		<u>Interest</u>	<u>2001</u> <u>EURm</u>	<u>2000</u> <u>EURm</u>
1989 - 2004	40.0	GBP	11.375%	65	66
1993 - 2003	150.0	FIM	Floating	25	25
				<u>90</u>	<u>91</u>

A bond for the period from 1996-2001, in the amount of EUR 47 million, expired in 2001 and at December 31, 2000 was included in current liabilities within the current portion of long-term debt.

24. Deferred taxes

	<u>2001</u> <u>EURm</u>	<u>2000</u> <u>EURm</u>
Current assets:		
Intercompany profit in inventory	114	87
Warranty provision	167	17
Other provisions	234	40
	<u>515</u>	<u>144</u>
Non-current assets:		
Tax losses carried forward	50	89
Warranty provision	47	38
Other provisions	93	117
Other temporary differences	135	29
	<u>325</u>	<u>273</u>
Deferred tax assets	840	417
Less: Valuation allowance	(8)	(16)
Total deferred tax assets	<u>832</u>	<u>401</u>
Current deferred tax liabilities:	(44)	(22)
Non-current deferred tax liabilities:		
Untaxed reserves	(21)	(47)
Fair value gains/losses	(11)	—
Other	(101)	—
	<u>(133)</u>	<u>(47)</u>
Total deferred tax liabilities	<u>(177)</u>	<u>(69)</u>
Net deferred tax asset	<u>655</u>	<u>332</u>
The tax (charged)/credited to shareholders' equity is as follows:		
On adjustments to opening equity		
Effect of adopting IAS 37	—	84
On equity movements in period:		
Fair value and other reserves, fair value gains/losses	(11)	—

Notes to the Consolidated Financial Statements (Continued)

24. Deferred taxes (Continued)

In 2000 the Group recognized a provision for social security costs on unexercised stock options. The cumulative prior year net effect of the change has been recorded as an adjustment to the opening balance of retained earnings. The deferred tax asset for the provision, EUR 84 million, has been recorded as an adjustment to the opening balance of deferred taxes.

Deferred income tax liabilities have not been established for withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries, as such earnings are permanently reinvested. At December 31, 2001 the Group had loss carryforwards of EUR 8 million (EUR 28 million in 2000) for which no deferred tax asset was recognized due to uncertainty of utilization of these losses. These losses will expire in year 2006.

25. Short-term borrowings

Short-term borrowings consist primarily of borrowings from banks. The weighted average interest rate at December 31, 2001 and 2000 is 4.9% and 5.9%, respectively. The weighted average interest rate on short-term borrowings is derived from loans denominated in different foreign currencies.

26. Accrued expenses

	<u>2001</u>	<u>2000</u>
	EURm	EURm
Social security, VAT and other taxes	1,339	911
Wages and salaries	217	219
Prepaid income	294	181
Other	1,627	1,549
Total	<u>3,477</u>	<u>2,860</u>

Other includes various amounts which are individually insignificant.

27. Provisions

	<u>Warranty</u>	<u>Other</u>	<u>Total</u>
	EURm	EURm	EURm
At January 1, 2001	964	840	1,804
Exchange differences	(6)	—	(6)
Additional provisions	1,313	478	1,791
Change in fair value	—	(161)	(161)
Unused amounts reversed	(33)	(93)	(126)
Charged to profit and loss account	1,280	224	1,504
Utilized during the year	(1,031)	(87)	(1,118)
At December 31, 2001	<u>1,207</u>	<u>977</u>	<u>2,184</u>

Notes to the Consolidated Financial Statements (Continued)

27. Provisions (Continued)

	<u>2001</u> EURm	<u>2000</u> EURm
Analysis of total provisions at December 31:		
Non-current	465	557
Current	1,719	1,247

Previously, the provision for social security costs on unexercised stock options (included within other provisions) was measured based on the intrinsic value of the options; the change in fair value in 2001 includes the impact of a change in accounting estimate.

The amount of the provision fluctuates in line with the fair value of the option; the change in fair value represents the amount by which the opening provision has reduced due to the reduction in the Nokia share price over the year. This change is offset in the profit and loss account by the change in the fair value of the cash settled equity swaps, used by the company to hedge this liability.

28. Earnings per share

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Numerator/EURm			
Basic/Diluted:			
Net profit	<u>2,200</u>	<u>3,938</u>	<u>2,577</u>
Denominator/1,000 shares			
Basic:			
Weighted average shares	4,702,852	4,673,162	4,593,761
Effect of dilutive securities:			
warrants and stock options	84,367	119,818	149,423
Diluted:			
Adjusted weighted average shares and assumed conversions	<u>4,787,219</u>	<u>4,792,980</u>	<u>4,743,184</u>

Under IAS 33, basic earnings per share is computed using the weighted average number of shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of shares outstanding during the period plus the dilutive effect of warrants and stock options outstanding during the period.

Notes to the Consolidated Financial Statements (Continued)

29. Commitments and contingencies

	<u>2001</u>	<u>2000</u>
	EURm	EURm
Collateral for own commitments		
Mortgages	18	12
Assets pledged ⁽¹⁾	4	4
Contingent liabilities on behalf of Group companies		
Other guarantees	505	656
Collateral given on behalf of other companies		
Securities pledged	33	23
Contingent liabilities on behalf of other companies		
Guarantees for loans	95	298

⁽¹⁾ Assets pledged include inventories.

There is no market for the guarantees listed above and they were issued without explicit cost; therefore, it is not practicable to establish the fair value of such instruments.

30. Leasing contracts

The Group leases office, manufacturing and warehouse space under various non-cancellable operating leases. Certain contracts contain renewal options for various periods of time.

The future costs for non-cancellable leasing contracts are as follows:

	<u>Operating lease</u>
Leasing payments, EURm	
2002	254
2003	213
2004	178
2005	165
2006	162
Thereafter	274
Total	<u>1,246</u>

Rental expense amounted to EUR 393 million in 2001 (EUR 370 million in 2000 and EUR 216 million in 1999).

31. Related party transactions

Nokia Pension Foundation is a separate legal entity that manages and holds in trust the assets for the Group's Finnish employee benefit plans, these assets include 0.3% of Nokia's shares. Nokia Pension Foundation is also the counterparty to equity swap agreements with the Group. The equity swaps are entered into to hedge the company's liability relating to future social security cost on stock options. During the year new transactions are entered into and old ones terminated based on the hedging need. The transactions and terminations are executed on standard commercial terms and conditions. The notional amount of the equity swaps outstanding at

Notes to the Consolidated Financial Statements (Continued)

31. Related party transactions (Continued)

December 31, 2001 is EUR 182 million (EUR 336 million in 2000). The fair value of the equity swaps at December 31, 2001 is EUR 10 million (EUR (19) million in 2000).

The group recorded net rental expense of EUR 4 million in 2001 (EUR 3 million in 2000 and EUR 1 million in 1999) pertaining to a sale-leaseback transaction with the Nokia Pension Foundation involving certain buildings and a lease of the underlying land.

There were no loans granted to top management at December 31, 2001 or 2000. See Note 4, Personnel expenses, for officers and directors remunerations.

32. Associated companies

	<u>2001</u> EURm	<u>2000</u> EURm	<u>1999</u> EURm
Share of results of associated companies	(12)	(16)	(5)
Dividend income	—	1	2
Share of shareholders' equity of associated companies	41	45	68
Receivables from associated companies			
Accounts receivable	—	4	1
Short-term loans receivable	2	1	—
Long-term loans receivable	—	31	—
Liabilities to associated companies current liabilities	—	—	6

33. Notes to cash flow statement

	<u>2001</u> EURm	<u>2000</u> EURm	<u>1999</u> EURm
Adjustments for:			
Depreciation and amortization (Note 9)	1,430	1,009	665
Loss/(Profit) on sale of property, plant and equipment .	148	(42)	(68)
Income taxes (Note 11)	1,192	1,784	1,189
Share of results of associated companies (Note 14)	12	16	5
Minority interest	83	140	79
Financial income and expenses (Note 10)	(125)	(102)	58
Impairment and customer finance charges (Note 7)	1,312	—	—
Other	80	—	—
Adjustments, total	<u>4,132</u>	<u>2,805</u>	<u>1,928</u>

Notes to the Consolidated Financial Statements (Continued)

33. Notes to cash flow statement (Continued)

	2001 EURm	2000 EURm	1999 EURm
Change in net working capital			
Increase in short-term receivables	(286)	(2,304)	(982)
Decrease (increase) in inventories	434	(422)	(362)
Increase in interest-free short-term liabilities	830	1,349	1,323
Change in net working capital	978	(1,377)	(21)
Non-cash investing activities			
Acquisition of:			
Amber Networks	408	—	—
Network Alchemy	—	336	—
DiscoveryCom	—	223	—
Rooftop	—	—	42
Total	408	559	42

34. Risk management

General risk management principles

Nokia's overall risk management philosophy is based on having a corporate-wide view on key risks including strategic, operational, financial and hazard risks. Risk management in Nokia means a systematic and pro-active way to analyse, review and manage all opportunities, threats and risks related to the Group's activities.

The principles documented in the Group's risk policy and accepted by the Nokia Board require that risk management is integrated into each business process. Business or function owners always have risk ownership. Key risks are reported to the Group level to enable group-wide risk management. There are specific risk management policies covering, for example, treasury and customer finance risks.

Financial risks

The key financial targets for Nokia are growth, profitability, operational efficiency and a strong balance sheet. The objective for the Treasury function is twofold: to guarantee cost-efficient funding for the Group at all times, and to identify, evaluate and hedge financial risks in close co-operation with the business groups. There is a strong focus in Nokia on creating shareholder value. The Treasury function supports this aim by minimizing the adverse effects caused by fluctuations in the financial markets on the profitability of the underlying businesses and thus on the financial performance of Nokia, and by managing the balance sheet structure of the Group.

Nokia has Treasury Centers in Geneva, Singapore/Beijing and Dallas/Sao Paulo, and a Corporate Treasury unit in Espoo. This international organization enables Nokia to provide the Group companies with financial services according to local needs and requirements.

The Treasury function is governed by policies approved by top management. Treasury Policy provides principles for overall financial risk management and determines the allocation of responsibilities for financial risk management in Nokia. Operating Policies cover specific areas such as foreign exchange risk, interest rate risk, use of derivative financial instruments, as well as

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

liquidity and credit risk. The Treasury operating policy in Nokia is risk averse. Business Groups have detailed Standard Operating Procedures supplementing the Treasury policy in financial risk management related issues.

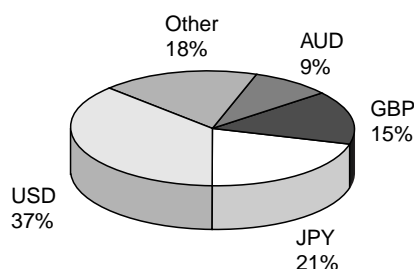
a) Market risk

Foreign exchange risk

Nokia operates globally and is thus exposed to foreign exchange risk arising from various currency combinations. Foreign currency denominated assets and liabilities together with expected cash flows from highly probable purchases and sales give rise to foreign exchange exposures. These transaction exposures are managed against various local currencies because of Nokia's substantial production and sales outside the Eurozone.

Due to the changes in the business environment, currency combinations may also change within the financial year. The most significant non-euro sales currencies during the year were U.S. dollar, British pound Sterling and Australian dollar. In general, the appreciation of the euro to other currencies has an adverse effect on Nokia's sales and operating profit in the medium to long term, while depreciation of the euro has a positive effect. The only significant non-euro purchasing currencies are Japanese yen and U.S. dollar.

Break-down by currency of the underlying foreign exchange transaction exposure at December 31, 2001:



According to the foreign exchange policy guidelines of the Group, material transaction foreign exchange exposures are hedged. Exposures are mainly hedged with derivative financial instruments such as forward foreign exchange contracts and foreign exchange options. The majority of financial instruments hedging foreign exchange risk have a duration of less than a year. The Group does not hedge forecasted foreign currency cash flows beyond two years. Nokia uses both fair value and cash flow foreign currency hedges to manage its exposure to foreign exchange risk.

Nokia uses the Value-at-Risk ("VaR") methodology to assess the foreign exchange risk related to the Treasury management of the Group exposures. The VaR figure represents the potential losses for a portfolio resulting from adverse changes in market factors using a specified time period and confidence level based on historical data. To correctly take into account the non-linear price function of certain derivative instruments, Nokia uses Monte Carlo simulation. Volatilities and correlations are calculated from a one-year set of daily data.

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

Since Nokia has subsidiaries outside the Eurozone, the euro-denominated value of the shareholder's equity of Nokia is also exposed to fluctuations in exchange rates. Equity changes caused by movements in foreign exchange rates are shown as a translation difference in the Group consolidation. Nokia uses, from time to time, foreign exchange contracts and foreign currency denominated loans to hedge its equity exposure arising from foreign net investments.

Interest rate risk

The Group is exposed to interest rate risk either through market value fluctuations of balance sheet items (i.e. price risk) or changes in interest income or expenses (i.e. re-investment risk). Interest rate risk mainly arises through interestbearing liabilities and assets. Estimated future changes in cash flows and balance sheet structure also expose the Group to interest rate risk.

Group companies are responsible for managing their short-term liquidity position, whereas the interest rate exposure of the Group is monitored and managed in the Treasury. Due to the current balance sheet structure of Nokia, emphasis is placed on managing the interest rate risk of investments.

Nokia uses the VaR methodology to assess and measure the interest rate risk in investment portfolios, which are benchmarked against a one-year investment horizon. The VaR figure represents the potential losses for a portfolio resulting from adverse changes in market factors using a specified time period and confidence level based on historical data. For interest rate risk Nokia uses variancecovariance methodology. Volatilities and correlations are calculated from a one-year set of daily data.

Equity price risk

Nokia has certain strategic minority investments in publicly traded companies. These investments are classified as available-for-sale. The fair value of the equity investments at December 31, 2001 was EUR 169 million (EUR 140 million in 2000).

There are currently no outstanding derivative financial instruments designated as hedges of these equity investments. In addition to the listed equity holdings, Nokia invests in private equity through Nokia Venture Funds. The book value of these equity investments at December 31, 2001 was 130 million U.S. dollars (121 million U.S. dollars in 2000). Nokia is exposed to equity price risk on social security costs relating to stock option plans. Nokia hedges this risk by entering into cash settled equity swaps.

b) Credit risk

Customer Finance Credit Risk

Telecommunications network operators sometimes require their suppliers to arrange or provide term financing in relation to infrastructure projects. Nokia has maintained a financing policy aimed at close cooperation with banks, financial institutions and Export Credit Agencies to support selected customers in their financing of infrastructure investments. Nokia's intent is, market conditions permitting, to mitigate this exposure by arrangements with these institutions and investors.

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

Credit risks related to customer financing are systematically analyzed, monitored and managed by Nokia's Customer Finance organization, reporting to the Chief Financial Officer. Credit risks are approved and monitored by Nokia's Credit Committee along principles defined in the Company's credit policy and according to the Group's credit approval process. The Credit Committee consists of the CFO, Group Controller, Head of Group Treasury and Head of Nokia Customer Finance.

Nokia's infrastructure business is concentrated amongst mobile, wireless operators. The customer finance portfolio is substantially all in this group. In keeping with the Group's financing approach, the majority of the credit risk is to i) established mobile network operators ("incumbents") with an investment grade credit rating as determined by a major credit rating agency or equivalent as determined by Nokia if no ratings are available (collectively, "investment grade") or ii) operators supported by other investment grade telecom operators through ownership stakes and various operational and technical support ("sponsor"). However, there is no certainty that the current sponsors will continue their involvement with the operators, and the sponsors generally do not provide guarantees on the loan balances. Nokia's credit risk to start-up operators ("greenfield operators") is substantially all to operators with investment grade sponsors.

The outstanding exposures on term customer financing at December 31, 2001 were EUR 1,255 million (EUR 1,226 million in 2000) out of which EUR 1,128 million were long-term loans receivable (EUR 907 million in 2000) and EUR 127 million were contingent liabilities (EUR 319 million in 2000). For details of one-time charges on customer finance charges see Note 7.

Term customer financing portfolio at December 31, 2001 was:

	<u>Outstanding</u>	<u>Commitment</u>	<u>Total</u>	<u>%</u>
	EURm	EURm	EURm	
Total Portfolio	<u>1,255</u>	<u>2,955</u>	<u>4,210</u>	100%
Incumbent, Investment Grade/ I.G. Sponsor	376	1,191	1,568	37%
Incumbent, non-I.G. Sponsor	<u>89</u>	<u>470</u>	<u>559</u>	13%
Total Incumbent	<u>465</u>	<u>1,661</u>	<u>2,127</u>	51%
Greenfield, I.G. Sponsor	751	1,288	2,040	48%
Greenfield, non-I.G. Sponsor	<u>39</u>	<u>5</u>	<u>44</u>	1%
Total Greenfield	<u>790</u>	<u>1,293</u>	<u>2,083</u>	49%

Financial credit risk

Financial instruments contain an element of risk of the counterparties being unable or unwilling to meet their obligations. This risk is measured and monitored by the Treasury function. The Group minimizes financial credit risk by limiting its counterparties to a sufficient number of major banks and financial institutions.

Direct credit risk represents the risk of loss resulting from counterparty default in relation to on-balance sheet products. The fixed income and money market investment decisions are based on strict creditworthiness criteria. The outstanding investments are also constantly monitored by the Treasury. Nokia does not expect the counterparties to default given their high credit ratings.

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

Investments

Current Available-for-sale investments⁽¹⁾

	2001	2000
	EURm	EURm ⁽²⁾
Government, long-term (bonds)	789	615
Government, short-term (bills)	—	—
Corporate, long-term (bonds)	1,475	384
Corporate, short-term (CP)	2,007	1,775
Total	<u>4,271</u>	<u>2,774</u>

⁽¹⁾ Available-for-sale investments are carried at fair value in 2001.

⁽²⁾ The comparative figures for the year ended December 31, 2000 are not restated.

c) Liquidity risk

Nokia guarantees a sufficient liquidity at all times by efficient cash management and by investing in liquid interest bearing securities. Due to the dynamic nature of the underlying business Treasury also aims at maintaining flexibility in funding by keeping committed and uncommitted credit lines available. During the year Nokia further strengthened its committed funding sources with a USD 1.75 billion revolving credit facility. The committed facilities at year end totalled USD 2.6 billion.

The most significant existing funding programs include:

Revolving Credit Facility of USD 750 million, matures in 2002

Revolving Credit Facility of USD 500 million, matures in 2003

Revolving Credit Facility of USD 350 million, matures in 2004

Revolving Credit Facility of USD 1,000 million, matures in 2006

Local commercial paper program in Finland, totalling EUR 750 million

Euro Commercial Paper (ECP) program, totalling USD 500 million

US Commercial Paper (USCP) program, totalling USD 500 million

None of the above programs have been used to a significant degree in 2001.

Nokia's international creditworthiness facilitates the efficient use of international capital and loan markets. The ratings of Nokia from credit rating agencies as at December 31, 2001 were:

Short-term	Standard & Poor's	A-1
	Moody's	P-1
Long-term	Standard & Poor's	A
	Moody's	A1

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

Hazard risk

Nokia strives to ensure that all financial, reputation and other losses to the Group and our customers are minimized through preventive risk management measures or purchase of insurance. Insurance is purchased for risks, which cannot be internally managed. Nokia purchases both annual insurance policies for specific risks and multi-line multi-year insurance policies where available, covering a variety of risks to decrease the likelihood of non-anticipated sudden losses.

Nokia's Corporate Risk Management function's objective is to ensure that Group's hazard risks, whether related to physical assets (e.g. buildings) or intellectual assets (e.g. Nokia brand) or potential liabilities (e.g. product liability) are optimally insured.

Notional amounts of derivative financial instruments⁽¹⁾

	2001 EURm	2000 EURm
Foreign exchange forward contracts ⁽²⁾⁽³⁾	20,978	10,497
Currency options bought ⁽³⁾	1,328	2,165
Currency options sold ⁽³⁾	1,209	2,209
Interest rate swaps	—	250
Cash settled equity swaps ⁽⁴⁾	182	336

⁽¹⁾ The notional amounts of derivatives summarized here do not represent amounts exchanged by the parties and thus are not a measure of the exposure of Nokia caused by its use of derivatives.

⁽²⁾ Notional amounts outstanding include positions which have been closed off.

⁽³⁾ As at December 31, 2001 notional amounts include contracts amounting to EUR 1.1 billion used to hedge the shareholders' equity of foreign subsidiaries (December 31, 2000 EUR 0.7 billion).

⁽⁴⁾ Cash settled equity swaps can be used to hedge risk relating to incentive programs and investment activities.

Notes to the Consolidated Financial Statements (Continued)

34. Risk management (Continued)

Fair values of derivatives

The net fair values of derivative financial instruments at the balance sheet date were:

	<u>2001</u>	<u>2000</u>
	EURm	EURm
Derivatives with positive fair value ⁽¹⁾ :		
Forward foreign exchange contracts ⁽²⁾	186	191
Currency options purchased	11	47
Cash settled equity swaps	10	—
Embedded derivatives ⁽³⁾	6	—
Derivatives with negative fair value ⁽¹⁾ :		
Forward foreign exchange contracts ⁽²⁾	(214)	(269)
Currency options written	(7)	(38)
Cash settled equity swaps	—	(19)

⁽¹⁾ Out of the forward foreign exchange contracts and currency options, fair value EUR 3 million was designated for hedges of net investment in foreign subsidiaries as at December 31, 2001 (EUR (1) million at December 31, 2000) and reported in translation difference.

⁽²⁾ Out of the foreign exchange forward contracts, fair value EUR (38) million was designated for cash flow hedges as at December 31, 2001 (EUR (114) million at December 31, 2000) and reported in fair value and other reserves.

⁽³⁾ Embedded derivatives are components of contracts having the characteristics of derivatives, and thus requiring fair valuing of such components. The change in the fair value is reported in other financial income and expenses.

35. Principal Nokia Group companies at December 31, 2001

	<u>Group</u>
	majority
	%
US Nokia Inc.	100.0
DE Nokia GmbH	100.0
GB Nokia UK Limited	100.0
KR Nokia TMC Limited	100.0
CN Beijing Nokia Mobile Telecommunications Ltd	50.0
NL Nokia Finance International B.V.	100.0
HU Nokia Komárom Kft	100.0
BR Nokia do Brazil Tecnologia Ltda	100.0
IT Nokia Italia Spa	100.0
FR Nokia France S.A.	100.0
CN Dongguan Nokia Mobile Phones Company Ltd	70.0
CN Beijing Nokia Hang Xing Telecommunications Systems Co. Ltd	69.0

Notes to the Consolidated Financial Statements (Continued)

35. Principal Nokia Group companies at December 31, 2001 (Continued)

Shares in listed companies

Group holding more than 5%

	<u>Group holding %</u>	<u>Group voting %</u>
Nextrom Holding S.A.	59.97	39.97*
Nokian Renkaat Oyj/Nokian Tyres plc	19.2	19.2

* Nokia has agreed to abstain from exercising the voting rights relating to certain shares.

A complete list of subsidiaries and associated companies is included in Nokia's Statutory Accounts.

36. Subsequent events (unaudited)

On January 28, 2002 we commenced, in conjunction with co-plaintiff Motorola Credit Corporation, a lawsuit in a US federal court in New York, United States against individual members of the Uzan family, controlling owners of Telsim Mobil (Telekomunikasyon Hizmetleri A.S.), a Turkish telecommunications company, and certain corporations affiliated with and controlled by the Uzans. The lawsuit alleges that the defendants violated the Racketeering Influenced and Corrupt Organizations Act by fraudulently inducing us and Motorola, through a pattern of fraudulent and illegal conduct, to provide financing to Telsim, which is owned and controlled by the Uzans and their affiliates. Simultaneously with the filing of the lawsuit, we and Motorola obtained temporary injunctive relief prohibiting the defendants from, among other things, removing or transferring assets from Telsim and transferring or encumbering certain real and personal property located in New York owned by the defendants.

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles

The Group's consolidated financial statements are prepared in accordance with International Accounting Standards, which differ in certain respects from accounting principles generally accepted in the United States (U.S. GAAP). The principal differences between IAS and U.S. GAAP are

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

presented below together with explanations of certain adjustments that affect consolidated net income and total shareholders' equity as of and for the years ended December 31:

	2001 EURm	2000 EURm	1999 EURm
Reconciliation of net income			
Net income reported under IAS	2,200	3,938	2,577
U.S. GAAP adjustments:			
Pension expense	(22)	(13)	9
Development costs	(104)	(65)	(47)
Marketable securities	—	(10)	(15)
Sale-leaseback transactions	—	—	4
Provision for social security cost on stock options	(132)	34	—
Stock compensation expense	(85)	(46)	—
Identifiable intangibles acquired	(7)	—	—
Amortization of goodwill	28	—	—
Cash flow hedges	(22)	—	—
Deferred tax effect of U.S. GAAP adjustments	47	9	14
Net income under U.S. GAAP	<u>1,903</u>	<u>3,847</u>	<u>2,542</u>
Presentation of comprehensive income under U.S. GAAP:			
Other comprehensive income:			
Foreign currency translation adjustment	(21)	104	61
Net unrealized (losses) gains on securities, net of tax:			
Net unrealized holding (losses) gains during the year	(67)	(30)	91
Transfer to profit and loss account on impairment	74	—	—
Less: Reclassification adjustment for gains included in income	(7)	(44)	(23)
Other comprehensive income	<u>(21)</u>	<u>30</u>	<u>129</u>
Comprehensive income	<u>1,882</u>	<u>3,877</u>	<u>2,671</u>
Reconciliation of shareholders' equity			
Total shareholders' equity reported under IAS	12,205	10,808	
U.S. GAAP adjustments:			
Pension expense	(32)	41	
Development costs	(355)	(251)	
Marketable securities	—	58	
Provision for social security cost on stock options	125	257	
Deferred compensation	(47)	(24)	
Share issue premium	178	70	
Stock compensation	(131)	(46)	
Acquisition purchase price	4	—	
Identifiable intangibles acquired	(7)	—	
Amortization of goodwill	28	—	
Deferred tax effect of U.S. GAAP adjustments	53	(42)	
Total shareholders' equity under U.S. GAAP	<u>12,021</u>	<u>10,871</u>	

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

Earnings per share under U.S. GAAP

Earnings per share amounts after giving retroactive effect to the 4-for-1 stock split in 2000 and stock splits in prior years, are presented below:

	2001	2000	1999
	EUR	EUR	EUR
Earnings per share (net income):			
Basic	0.40	0.82	0.55
Diluted	0.40	0.80	0.54

Pension expense

Under IAS, pension assets, defined benefit pension liabilities and expense are actuarially determined in a similar manner to U.S. GAAP. However, under IAS the prior service cost, transition adjustments and expense resulting from plan amendments are generally recognized immediately. Under U.S. GAAP, these expenses are generally recognized over a longer period. The U.S. GAAP pension adjustment to net income includes an adjustment to appropriately reflect the difference between the pension asset as determined by applying IAS 19, Employee Benefits, and the pension asset determined by applying FAS 87, Employers' Accounting for Pensions.

Development costs

Development costs have been capitalized under IAS after the product involved has reached a certain degree of technical feasibility. Capitalization ceases and depreciation begins when the product becomes available to customers. The depreciation period of these capitalized assets is between two and five years.

Under U.S. GAAP software development costs would similarly be capitalized after the product has reached a certain degree of technical feasibility. However, certain non-software related development costs capitalized under IAS would not be capitalizable under U.S. GAAP and therefore would have been expensed.

Marketable securities

Under IAS, prior to the adoption of IAS 39 on January 1, 2001, investments in marketable securities were carried at cost. Upon adoption of IAS 39, all available-for-sale investments, which includes all marketable securities, are measured at fair value and gains and losses are recognized within equity until realized in the profit and loss account upon sale or disposal.

Under U.S. GAAP, the Group's marketable securities would be classified as available-for-sale and carried at aggregate fair value with gross unrealized holding gains and losses reported as a separate component of shareholders' equity. Investments in equity securities that are not traded on a public market are carried at historical cost.

Total proceeds from the sale of available-for-sale securities were EUR 94 million in 2000 and EUR 106 million in 1999.

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

Sale-leaseback transactions

Under IAS, the Group recorded a gain from a transaction involving the sale of property and equipment and has recorded rental expense associated with the subsequent leaseback of such property and equipment.

Under U.S. GAAP, the sale-leaseback transaction would be treated as financing. Accordingly until the gain is realized through the sale of the property and equipment, the gain would be reversed and the proceeds from the sale would be treated as an obligation. Rental payments would be applied to interest expense on the obligation as well as to reducing the principal amount of the obligation.

Provision for social security cost on stock options

Under IAS, the Group provides for social security costs on stock options on the date of grant, based on fair value. The provision is adjusted for movements in the fair value of the options.

Under U.S. GAAP, no expense is recorded until the options are exercised.

Stock compensation

Under IAS, no compensation expense is recorded on stock options granted. Under U.S. GAAP, the Group follows the methodology in APB 25 to measure employee stock compensation.

Certain employees have been granted stock options with an exercise price less than the quoted market value of the underlying stock on the date of grant. This intrinsic value is recorded as deferred compensation within shareholders' equity and recognized in the profit and loss account over the vesting period of the stock options.

Acquisition purchase price

Under IAS, when the consideration paid in a business combination includes shares of the acquirer, the purchase price of the acquired business is determined at the date on which the shares are exchanged.

Under U.S. GAAP, the measurement date for shares of the acquirer is the first day on which both the number of acquirer shares and the amount of other considerations become fixed. The average share price for a few days before and a few days after the measurement date is then used to value the shares.

Identifiable intangibles acquired

Under IAS, acquired unpatented technology is not separately recognized on acquisition but included within goodwill. Under U.S. GAAP, any unpatented technology acquired in a business combination is recorded as an identifiable intangible asset with a related deferred tax liability. The intangible asset is amortized over its estimated useful life.

The gross amount of intangible assets is EUR 109 million, which is being amortized over an estimated useful life of five years. The amortization expense for the period from acquisition through December 31, 2001 was EUR 7 million.

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

Amortization of goodwill

Under IAS, goodwill is amortized over its estimated useful life.

Under U.S. GAAP, the Group adopted the transition provisions of FAS 141 with effect from July 1, 2001. As a result of the adoption of FAS 141, goodwill arising from the Amber Networks acquisition is not amortized. Goodwill and intangible assets, acquired in business combinations completed before July 1, 2001 have continued to be amortized until the adoption of FAS 142 on January 1, 2002.

The amount of goodwill under U.S. GAAP relating to the acquisition of Amber Networks in 2001 was EUR 315 million. The goodwill is not deductible for tax purposes.

Cash flow hedges

As a result of a specific difference in the rules under IAS 39, Financial Instruments: Recognition and Measurement and FAS 133, Accounting for Derivative Instruments and Hedging Activities, relating to hedge accounting, certain foreign exchange gains and losses classified within equity under IAS would be included in the income statement under U.S. GAAP.

Disclosures required by U.S. GAAP

Dependence on limited sources of supply

Our manufacturing operations depend on obtaining adequate supplies of fully functional components on a timely basis. Our principal requirements are for electronic components, such as semiconductors, microprocessors, micro controllers and memory devices, which have a wide range of applications in our communications products. In addition, a particular component may be available only from a limited number of suppliers. We also outsource a portion of our product production to third parties. If a supplier of components fails to meet the required quality standards, and some of our products consequently fail to function fully, this could cause us to incur warranty or recall costs, could adversely affect our sales and consumer confidence in our products, and ultimately could harm the Nokia brand. Suppliers may from time to time extend lead times, limit supplies or increase prices due to capacity constraints or other factors, which could adversely affect our ability to deliver our products on a timely basis. Moreover, if one of the third parties to which we outsource production fails to perform, or experiences delays or disruption to its production, or financial difficulties, this could adversely affect our business.

Segment information

The accounting policies of the segments are the same as those described in the "Accounting principles" Note.

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

Nokia accounts for intersegment revenues and transfers as if the revenues or transfers were to third parties, that is, at current market prices. Nokia evaluates the performance of its segments and allocates resources to them based on operating profit.

	<u>2001</u> EURm	<u>2000</u> EURm	<u>1999</u> EURm
Long-lived assets by location of assets ⁽¹⁾ :			
Finland	1,161	1,105	858
USA	299	427	350
China	266	269	169
Great Britain	227	230	165
Germany	182	250	203
Other	379	451	286
Group	<u>2,514</u>	<u>2,732</u>	<u>2,031</u>
	<u>2001</u> EURm	<u>2000</u> EURm	<u>1999</u> EURm
Capital additions to long-lived assets ⁽¹⁾ :			
Nokia Networks	264	277	315
Nokia Mobile Phones	362	855	667
Nokia Ventures Organization	9	33	42
Common Group Functions	296	269	220
Group	<u>931</u>	<u>1,434</u>	<u>1,244</u>

⁽¹⁾ Long-lived assets includes property, plant and equipment.

Compensation expense

As allowed by FAS 123, Accounting for Stock-Based Compensation (FAS 123) under U.S. GAAP the Group has elected to continue to apply APB Opinion 25, Accounting for Stock Issued to Employees (APB 25) and related interpretations in accounting for its stock-based compensation schemes. The exercise price of each option generally equals the market price of Nokia's share on the date of grant. Generally, options vest on the date they become exercisable. Compensation cost recorded under APB 25 was EUR 85 million in 2001 (EUR 46 million in 2000).

Had compensation cost for management incentive schemes been determined based on the fair value at the grant dates for options under that scheme consistent with the method prescribed in

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

FAS 123, the Group's net income and earnings per share would have been reduced to the pro forma amounts indicated below:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Net income under U.S. GAAP (EURm)			
As reported	1,903	3,847	2,542
Pro forma	1,321	3,447	2,395
Basic earnings per share (EUR)			
As reported	0.40	0.82	0.55
Pro forma	0.28	0.74	0.52
Diluted earnings per share (EUR)			
As reported	0.40	0.80	0.54
Pro forma	0.28	0.72	0.50

Under FAS 123, pro forma disclosures are only required in relation to awards granted after January 1, 1995. Prior to January 1, 2001, Nokia calculated the fair value of the options using the binomial option pricing model. From January 1, 2001, we calculated the fair value of options using the Black Scholes model. The use of the Black Scholes model rather than the binomial pricing model did not have a material effect on the compensation expense or on the pro forma net income or per share amounts disclosed. The fair value of the options is estimated on the date of grant with the following assumptions:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Weighted-average assumptions			
Dividend yield	0.93%	0.37%	0.72%
Expected volatility	50%	45%	40%
Risk-free interest rate	4.05%	4.69%	3.13%
Expected life (years)	2.8	2.3	3.0

The weighted-average fair value of options granted was EUR 10.70 in 2001, EUR 16.89 in 2000 and EUR 5.83 in 1999.

Pension expense

Under IAS, the determination of pension expense for defined benefit plans differs from the methodology set forth in U.S. GAAP. For purposes of U.S. GAAP, the Group has estimated the effect on net income and shareholders' equity assuming the application of SFAS No. 87 in calculating pension expense as of January 1, 1992.

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

For its single-employer defined benefit pension schemes, net periodic pension cost included in the Group's U.S. GAAP net income for the years ended December 31, 2001, 2000 and 1999, includes the following components.

	2001	2000	1999
	EURm	EURm	EURm
Service cost—benefits earned during the year ⁽¹⁾	49	40	22
Interest on projected benefit obligation	40	35	25
Expected return on assets	(74)	(78)	(40)
Amortization of prior service cost/(benefit)	2	7	(1)
Recognized net actuarial loss	(21)	(32)	(10)
Amortization of transition asset	2	2	2
Curtailement	(1)	—	—
Net periodic pension income	<u>(3)</u>	<u>(26)</u>	<u>(2)</u>

⁽¹⁾ Excludes premiums associated with pooled benefits.

The following table sets forth the changes in the benefit obligation and fair value of plan assets during the year and the funded status of the significant defined benefit pension plans showing the amounts that would be recognized in the Group's consolidated balance sheet in accordance with U.S. GAAP at December 31:

	2001		2000	
	Domestic plans	Foreign plans	Domestic plans	Foreign plans
	EURm		EURm	
Projected benefit obligation at beginning of year	(453)	(194)	(400)	(200)
Foreign exchange	—	1	—	(1)
Service cost	(38)	(11)	(31)	(8)
Interest on projected benefit obligation	(29)	(12)	(25)	(11)
Plan participants' contributions	—	(3)	—	(3)
Actuarial (loss) gain	(18)	(27)	(4)	22
Curtailement	—	2	—	—
Benefits paid	7	8	7	7
Projected benefit obligation at end of year	<u>(531)</u>	<u>(236)</u>	<u>(453)</u>	<u>(194)</u>

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

	2001		2000	
	Domestic plans	Foreign plans	Domestic plans	Foreign plans
	EURm		EURm	
Plan assets at fair value at beginning of year	921	117	1,000	107
Foreign exchange	—	(1)	—	—
Actual return on plan assets	(251)	(3)	(73)	3
Employer contribution	1	15	1	10
Plan participants' contributions	—	3	—	3
Benefits paid	(7)	(8)	(7)	(6)
Plan assets at fair value at end of year	<u>664</u>	<u>123</u>	<u>921</u>	<u>117</u>
Excess (deficit) of plan assets over projected benefit obligation	133	(113)	468	(77)
Unrecognized transition obligation	3	7	3	9
Unrecognized net (gain)/loss from experience differences	(30)	5	(386)	(33)
Unamortized prior service cost	36	—	38	—
Prepaid (accrued) pension cost	<u>142</u>	<u>(101)</u>	<u>123</u>	<u>(101)</u>

In 2001 the foreign plans were underfunded. In 2000 the foreign plans consisted of both overfunded and underfunded plans. The details of these plans are as follows:

	2001	2000	
	Underfunded	Overfunded	Underfunded
	EURm		
Aggregate benefit obligation	(236)	(41)	(153)
Fair value of plan assets	123	43	74
Funded status	<u>(113)</u>	<u>2</u>	<u>(79)</u>

Weighted-average assumptions used in calculation of pension obligations are as follows:

	2001		2000	
	Domestic	Foreign	Domestic	Foreign
Discount rate used in determining present values	5.8%	5.9%	5.8%	6.1%
Annual rate of increase in future compensation levels	4.0%	3.1%	4.0%	3.1%
Expected long-term rate of return on plan assets	7.5%	6.5%	7.3%	6.6%

The Group also contributes to multiemployer plans, insured plans and defined contribution plans. Such contributions were approximately EUR 195 million, EUR 116 million and EUR 126 million in 2001, 2000 and 1999, respectively, including premiums associated with pooled benefits.

At December 31, 2001 approximately 50% of domestic plan assets consist of Nokia securities and loans to Nokia. The remaining plan assets consist primarily of real estate, cash and other short-term investments.

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

Foreign currency translation

Net foreign exchange losses of EUR (256) million, EUR (81) million and EUR (15) million were included in the determination of net income of which EUR (309) million, EUR (82) million and EUR (10) million were included in cost of sales for the year ended December 31, 2001, 2000, and 1999, respectively. EUR 78 million of the net foreign exchange gains were included in the determination of net sales in 2001.

Cash and cash equivalents

Included within bank and cash and cash equivalents is EUR 43 million and EUR 23 million of restricted cash and EUR 4,271 million and EUR 2,774 million of available-for-sale investments at December 31, 2001 and 2000, respectively. Under U.S. GAAP bank overdrafts of EUR 86 million and EUR 243 million in 2001 and 2000, respectively, for which there is a legal right of offset would be included within cash and cash equivalents and available-for-sale investments would be excluded.

Consolidation

Nokia has an investment in a subsidiary in which it owns 50% of the voting shares, which under IAS has been consolidated as Nokia has control of its operating and financial policies. Under U.S. GAAP, this entity would be accounted for as a joint venture using the equity method. The impact of deconsolidation has an immaterial effect on the consolidated financial statements when adjusted for the impact of sales from Nokia to the subsidiary and the subsidiary's sales to Nokia.

Under U.S. GAAP, related party transactions with the subsidiary include sales by Nokia to the subsidiary of EUR 2,090 million (EUR 1 558 million in 2000 and EUR 817 million in 1999) and purchases by Nokia from the subsidiary of EUR 1,536 million (EUR 916 million in 2000 and EUR 210 million in 1999).

New US Accounting Standards

In July 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 141, *Business Combinations* (FAS 141). The Statement is effective for all business combinations initiated after June 30, 2001 and for all business combinations accounted for by the purchase method that are completed after June 30, 2001. FAS 141 prohibits the pooling-of-interests method of accounting for business combinations and prescribes the initial recognition and measurement of goodwill and other intangible assets, accounting for negative goodwill and the required disclosures in respect of business combinations. Nokia has assessed the impact of the adoption of FAS 141 on its consolidated financial statements and believes the impact will not be material.

The FASB also issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* (FAS 142) in July 2001. The Statement is effective for fiscal years beginning after December 15, 2001. FAS 142 requires that goodwill, including previously existing goodwill, and intangible assets with indefinite useful lives not be amortized; reporting units must be identified for the purpose of assessing potential future impairments of goodwill on an annual basis. Intangible assets with finite useful lives will continue to be amortized over their estimated useful

Notes to the Consolidated Financial Statements (Continued)

37. Differences between International Accounting Standards and U.S. Generally Accepted Accounting Principles (Continued)

lives. However, the forty-year limitation on the amortization period of intangible assets that have finite lives has been removed.

FAS 142 requires that goodwill be tested annually for impairment using a two-step process. The first step is to identify a potential impairment and, in transition, this step must be measured as of the beginning of the fiscal year. However, a company has six months from the date of adoption to complete the first step. The second step of the goodwill impairment test measures the amount of the impairment loss (measured as of the beginning of the year of adoption), if any, and must be completed by the end of the Company's fiscal year. Intangible assets deemed to have an indefinite life will be tested for impairment using a one-step process, which compares the fair value to the carrying amount of the asset as of the beginning of the fiscal year.

The Group will be required to adopt the provisions of FAS 142 with effect from January 1, 2002. At December 31, 2001 Nokia had under U.S. GAAP unamortized goodwill of EUR 813 million, which will be subject to the transition provisions of FAS 141 and FAS 142. Amortization expense under U.S. GAAP related to goodwill was EUR 274 million and EUR 140 million for the year ended December 31, 2001 and 2000, respectively. Because of the extensive effort needed to comply with adopting FAS 142, it is not practicable to reasonably estimate the impact of adopting FAS 142 on the Group's financial statements, including whether any transitional impairment losses will be required to be recognized as the cumulative effect of a change in accounting principles.

FAS 143, *Accounting for Obligations Associated with the Retirement of Long-Lived Assets* (FAS 143), was issued by the FASB in July 2001. This Standard will be effective for the Group's fiscal year beginning January 1, 2003 and provides the accounting requirements for retirement obligations associated with tangible long-lived assets. FAS 143 requires that the obligation associated with the retirement of tangible long-lived assets be capitalized into the asset cost at the time of initial recognition. The liability is then discounted to its fair value at the time of recognition using the guidance provided by that standard. The requirements of this standard will be reflected as a cumulative effect adjustment to income. The Group is currently evaluating the impact of this statement on the results of operations and financial position.

The FASB also issued FAS 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (FAS 144) in August 2001. This standard will be effective for the Group's fiscal year beginning January 1, 2002 and will be applied prospectively. The objectives of FAS 144 are to address issues relating to existing impairment guidance and to develop a single accounting model for long-lived assets to be disposed of by sale, based on the framework established in FAS 121. The standard requires that long-lived assets that are to be disposed of by sale be measured at the lower of book value or fair value less cost to sell. Additionally, FAS 144 expands the scope of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and will be eliminated from the ongoing operations of the entity in a disposal transaction. The Group is currently evaluating the impact of this statement on its results of operations and financial position.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

NOKIA CORPORATION

By: /s/ MAIJA TORKKO
Name: Maija Torkko
Title: Senior Vice President, Group Controller

By: /s/ URSULA RANIN
Name: Ursula Ranin
Title: Vice President, General Counsel

May 21, 2002

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